

THE SAIER CATALOG OF

RARE AND POPULAR FLOWER SEEDS VEGETABLE AND GRASS SEEDS

GARDEN BULBS - ALL KINDS

OVER 4,000
SPECIES & VARIETIES

GARDENER'S SUPPLIES

PIONEER SEED COMPANY

DIMONDALE, MICHIGAN, U.S.A.

Since 1911

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In The Mail

About the first letter that came in for this issue, was from Emily S. Lowman, saying, "I am interested in Campanulas and hope you will have a list of the rock garden types soon" and for some reason unknown, the classification for the Campanulas, got scattered all over the page, but to make up for this, there was added many more Campanulas this month and we hope that she will be able to find species she is interested in. You will find this about the most complete list of Campanulas but we still expect to have more shortly, especially the rare types. Mrs. Lowman also wishes a "double rose Dianthus, gray foliage, that is used so much in Switzerland in walls, it is very fragrant and dwarf." We have written our source in Switzerland and no doubt will have this species for her in time for planting.

Then, way up in Canada, Mrs. A. M. McPherson, of Winnipeg writes? Thanks so much for your catalog and for being so prompt. I enjoyed your catalog very much and personally, I think it is an improvement over those gaudy pictures which other companies use year after year." We might mention here, that our mailing list and customers come from the better type of flower gardeners, that is, we mean to say, those who actually take a great deal of pleasure in their flower garden and plant only the better strains. 90% of our customers are readers of such high class flower magazines as the Flower Grower, Home Garden, Sun-Up, Garden Chronicle, etc.

Mrs. Stella G. Bishop of Essex, Mass. says, "I find your catalog extremely interesting. Please keep me on your list. Why don't you charge for it on a yearly rate, it is worth it." Well, hereletter is payment enough, thanks a lot Mrs. Bishop and we trust you will grow some very nice flowers this year.

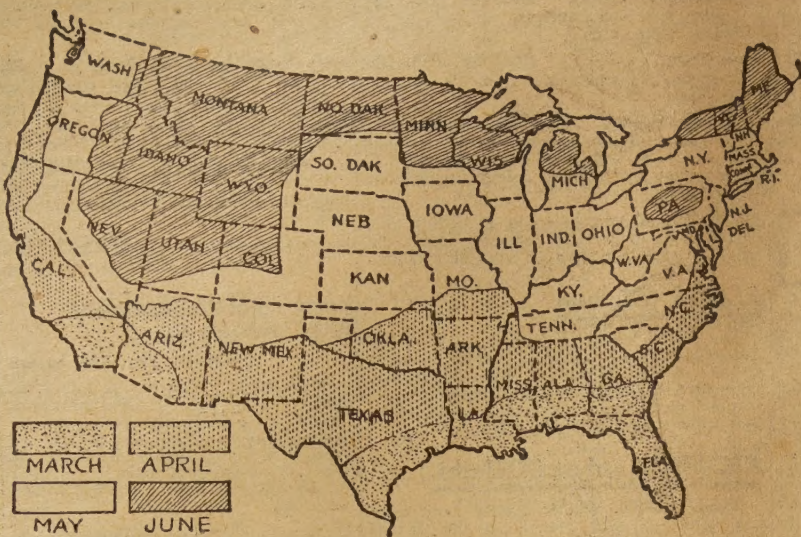
We have a request last month - from a botanist, sending us the names and addresses of Begonia enthusiasts of his acquaintance, for catalogs. These were gladly mailed out last month and again this month; those that wish further copies please drop us a postal, we were pleased to mail you copies and hope they were of interest. Those that are especially interested in one genus, afford their member a great deal of pleasure of the very highest type, and it our policy to encourage this in every way possible. Usually they have seed exchanges, and these are all right and a good deal is accomplished for what is the use of growing something and keeping it all to yourself. Make use of it and these seed exchanges are the easiest method of sending a little part of

(See IN THE MAIL, Page 18)

American Rock Garden Society

The Society wants to double their membership this year and all Rock Gardeners should join up now. The Society publishes a very interesting and instructive bulletin, that will be of value to all interested in rock gardening type plants. To increase the Society membership, means to increase the scope of the bulletin.

The annual dues are \$3.50 per year and should be sent to Dorothy E. Hansell, 19 Pittsford Way, Summit, N. J.



FROST RECORD MAP SHOWING WHEN LAST FROST MAY OCCUR

The above map shows approximately those locations where the last frosts of spring and the first in the fall, will occur. It is possible for frost to occur earlier or later than these dates and also there are many locations within these areas that vary, therefore the gardener will have to be cautious. Gardens located in towns will be more free from frost than those in the country; low places will have frost more. Plants marked HA, or hardy annuals can be planted as soon as the soil is workable but those marked TA, or tender annuals, should not be set out or seed planted, until time indicated on the above map.

Germination of Flower Seeds

NOTE: We are preparing considerable information on the matter of seed germination and especially as to light and darkness. Mr. Schrader is an expert flower seed grower in Germany and furnishes us with articles each month on some practical phase of flower growing. We are leaving his article just as he writes it, and very good English he uses too, but we can add that on the matter of frost, he does not mention the use of the freezing compartment of your refrigerator. This is easily understood, so when you are planting such seeds, place them in the freezing compartment for a few days, even to putting them in the ice cube tray and freezing the seed in the ice cube; to do this best fill the tray but half full at first and then after freezing for a while place a few seeds on top and freeze a little while longer and then add the water again freezing solid. Try the freezing treatment different ways. We will also try to give more information later on deep freeze treatment and we will be pleased to hear from any reader having experimented on the subject. Following is Mr. Schrader's article:

Only a few kinds of seeds will afford from their outward appearance conclusions on their inner quality, their age, vitality, etc. In comparing different seed-crops of one and the same kind under the magnifier you may find the one more glossy, the other more dull, the one more plump than the other, etc., and the dull and smaller seed-grain will of course be chosen by the gardener for his sowings only if he knows that it may retain pedigree-values for him, i. e., he will disregard in this case the usual advantage of higher germination in order to attain some valuable intrinsic feature of the plant. In general however, the question of germinative faculty and vitality is of paramount importance for every gardener. The seed-ball is full of mysteries and above all in the nascent stage greatest care should be bestowed on same and due consideration should be given to the behaviour and natural conditions of vegetation. Could you imagine that a seed-ball may react differently according to darkness or light for instance? It does so in fact and in the nascent stage light may be noxious to certain varieties as a promoter of the building of chlorophyll; light may check the development of the germ in acting too strongly—except certain kinds that have adapted themselves to light even as far as to claim light, such as most grasses, Umbellifers, Conifers, Gesneriaceae such as Achimenes, Saintpaulia, Sinningia, Streptocarpus, also Digitalis and Nicotiana. The number of sowings preferring darkness is how-

ever in the majority inasmuch as most seeds will require an envelope of earth to afford uniform moisture and temperature and are thus in obscurity by natural conditions already. Following varieties have been ascertained to be specific dark-germinators: Aconitum, Althaea, Asparagus, Cannabis, Cyclamen, Impatiens, Nemophylla, Nigella, Phacelia, Phlox Dr., Rheum, Ricinus, Scabiosa, Solanum, Solidago, Whitlavia and light should be afforded them only gradually when the seedling is really "out". In the case of the thick seeds, they will be in darkness by the soil-cover and for the fine-grained seeds pay attention to keep them in obscurity artificially. Certain scientists maintain that the expression dark—or light-germinators should be replaced by the terms flat and deep-germinators, but a lot of research work is still to be done in this respect as plants and their seeds behave so differently and to cite an example, the seeds of the big family of the Compositae will react differently on light if they come from the rim of the blossom as when they derive from the center zone!

Many claims for "non-germination" are laid before the seedsman's door but must be rejected by him due to the fact that a great number of seeds require frost to burst their hard seed-shell, such plants recruiting mostly among the alpine perennials. We can understand this as a preventative measure of nature to protect them from germinating in the warm autumn-noons of

Germinating Delphinium

We wanted to go into this matter more fully in the April issue and to cover it in the May issue may be too late for most growers as little seed will now be planted until the new crop comes in, and while we are mentioning the new crop, it will be best for anyone wanting the special strains, which usually turn out to be short items before the season is over, to place their orders now and when the seeds do arrive, the orders are always filled in the order in which they are received.

Always germinate Delphinium seed at around 50 degrees and this should be kept uniformly at 50 degrees; usually it is best to place the germinating pan or box on the north side of the house or at least this is claimed by some Delphinium growers, but on the other hand Delphiniums should be germinated in the dark and probably this fact has been overlooked and the germination, thus being better in the dark side of the house, the conclusion was that this was the place for it; try the seed pan in darkness, by not placing it so the sun can get to it and by covering it with paper. As Mr. Schrader says, also expose these seedlings slowly to sun light at the start. There has, also, been reports of Delphinium seed germinating even at 10 years, of course, after it was carefully stored and while we have not had this experience, ourselves, it is a fact that Delphinium seed does not lose its germination in the course of a few months as commonly supposed.

We will go into the starting of Delphinium in more detail in the next couple of months.

How Do You Get Our Catalogs

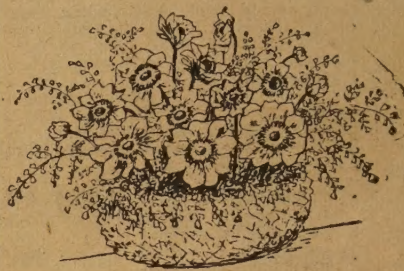
The Saier Catalog of Flower Seeds is published monthly and is sent free to our customers, those that are purchasing seeds from us. We are also pleased to mail copies to those that write us for copies, and these will be continued for a reasonable time; if you find that you are being missed, drop us a postal and ask to be placed on the mailing list. Then, again, we receive hundreds of requests from friends to send the catalog to people they think will be interested, and sometimes these lists run into several hundred, as was the case last month on Primula growers. Naturally we can send only a copy or two, when we do not know whether the catalog is of interest. Therefore if you have not yet written for your copies but have received one or two without a request, be sure to drop us a postal, so that you actually are on the mailing list.

Please be sure to give your complete address, in full, including zone numbers where you have them. Every day we get requests that are so written that we cannot make out the name correctly, and these of course, cannot be correctly placed in the files and thus are missed; and every week there are postals merely addressed, without a word being written.

We do not mail our catalogs to anyone over once, who has not asked for them; the cost of printing a catalog in itself, bars out such liberality. DROP US THAT POSTAL, PLEASE.

Anemone Japonica

The Japanese Anemones are one of the beauties closing the variegated flower-show of your outdoor garden-year and they come like a glorious finish before the curtain falls. These flowers of the fall remind one of Sweet Briars,



so lovely are they to look at, with their graceful white ax or pink blossoms, but valuable too for a decoration of your home and you can say spring has returned for a while, to be remembered. I made the first acquaintance of these perennials in an old park on the shores of the Bosphorus, where they grew in half shade in rich wood-soil. Friendship for life-time was closed with these flowers at first glance and some days later I met them again when decorating a festival banquet-table. Once more a fascination effect emanated from these tender beings, not as pompous as Chrysanthemums at that time of the year, but an atmosphere of joyful serenity filled the hall, with a colour-harmony of silvery-white, stamens golden-yellow and green. Oval and circular jardinieres and bowls were filled with short-cut material such as from twigs of the Spindle-tree, (See ANEMONE, Page 17)

Primulas For Garden

C. R. Worth

Few things can give more pleasure than a bed of brightly colored primroses on a chilly spring day, yet many gardeners still regard them as difficult plants which only an expert can manage. Nothing is farther from the truth, if one lives anywhere north of Washington, while even in southern California the tender species are freely planted in shaded beds.

True, there are many difficult primulas, some of which baffle even gardeners in especially favored Scotland and North Wales, where climatic conditions are nearly ideal for this type of plant. This is to be expected of a great race involving about 450 species, distributed throughout the mountainous regions of the northern hemisphere, from the Alps and the monsoon regions of Burma to the Arctic tundras, and on our own continent from the fog-bound Kuriles to the semi-arid peaks of the Mexican border, with a few outliers in the Andes of southern Chile. Such an immense number (See PRIMULAS, Page 21)

Special Offer Camassia Seed For Wet Meadows

We have several pounds of Camassia quamash seed, slightly mixed with Bistorta bistortoides that would be fine for seeding a wet meadow on some estate. When in bloom it is a sight to behold.

This is an excellent opportunity to establish these plants. PRICE: \$1.00 per lb. prepaid.

ABIES (AY-bi-ez)

—webbiana. **ABES-1. Pkt. 30c**
The needles are 1-2½ inches long, flat and silvery on the lower side, cones cylindrical, 6 inches long; a Himalayan tree from India.

ACACIA (ah-KAY-shah)

—augustissima. **ACAC-3. Pkt. 50c**
—constricta. **ACAC-2. Pkt. 50c**
Ornamental shrub with numerous yellow flowers, native of Texas.
—raemeriana. **ACAC-1. Pkt. 50c**
—torulosa. **ACAC-4. Pkt. 50c**

ACANTHUS (ah-KAN-thus)

(Bear's Breech). Perennial plants or thistle-like small shrubs native of the Old World. About 3 ft. tall with leaves 12-25 inches long and 6-10 inches wide; flowers whitish, rose or lilac borne on 18 in. spikes. They are semi-hardy and do best in rich, well drained soil and full sun light. They are best in background plantings. In the N. they require good winter protection. Seed sown in late April will flower in August.

—mollis, var. latifolia. **ACK-1. Pkt. 20c; ¼ oz. 40c**
A hardier variety with pretty foliage and rose flowers, 2-3 ft., HHP.

ACHILLEA (ak-i-LEE-ah)

(Milfoil or Yarrow). Hardy herbaceous perennials easily grown in any good soil and sunny location, flowering from June to Aug. or later. Flowers in clusters of small heads, white and yellow very good as cut flowers. Seed planted indoors in March or early April and set out doors early in May or June, setting out in garden in Sept. or Oct. for next year's flowers. Set plants 1 ft. apart; heights 1½-3 ft. Bone meal around plants in spring is good.

—chrysocoma. **ACH-4. Pkt. 25c**
Dense woolly foliage and bright yellow flowers; HP, 9 inches.

—filipendula. **ACH-2. Pkt. 20c; ¼ oz. 50c**
Sulphur-yellow colored flowers, plants, HP, 2 ft.

—filipendula. **ACH-5. Pkt. 25c**
A showy, tall species of robust habit, large yellow corymbs, HP, 5 ft.

—millefolium. **ACH-6. Pkt. 25c**
The native Yarrow of England, with round heads of white flowers, HP, 2 ft. tall.

—Corise Queen. **ACH-7. Pkt. 25c**
A beautiful Milfoil with rosy-cerise flowers, HP, 2 ft.

—Crimson Beauty. **ACH-8. Pkt. 25c**
A beautiful bright colored Yarrow, HP, 2 ft.

—patmica fl. pl. The Pearl. **ACH-3. Pkt. 15c; ¼ oz. \$1.25**
(Sneezewort). A pretty double white flowered variety, 2 ft. high and very much grown both for the border and cut flowers, HP.

—Taygetea. **ACH-9. Pkt. 50c**
A beautiful NEW variety with fine lemon colored flower heads, HP, 1 ft.

ACONITUM (AK-oh-nyt-um)

Herbaceous perennials, common name Monkshood. A. napellus is the poisonous species grown for the drug aconite. Seeds germinate slowly and usually are sown out doors in May or June in partial shade, or they can be started indoors in March or April. Plants do best if not transplanted. Thin to 18 in. apart when well started. Transplanting should be done in Sept. Bone meal is good fertilizer.

—palmatum. **ACD-1. Pkt. 20c**
Blue flowers 2½ in. across, found in Himalayan pastures up to 15,000 ft., HP.

—Wilsoni. **ACD-3. Pkt. 50c**
Handsomen spikes of very large, porcelain blue flowers, late, very fine; HP, 3 ft.

—Barker's Variety. **ACD-2. Pkt. 60c**
A beautiful novelty in an amethyst-blue color, HP, 6 ft. tall.

ACROCLINIUM

(ak-roh-KLIN-i-um)

(Correct botanical name, Helipterum—(hee-LIP-ter-um)—roseum). An annual grown mainly for its dried flowers, it being one of the best "everlasting". For drying, cut flowers before fully open; they retain their color for years. Flowers daisy-like, 2-in.-3-in. across, double and semi-double, petals of silky appearance, plant about 1-2½ ft. tall. It is one of the earliest of the annual group. Seeds generally sown outdoors where plants are to grow, or they can be started indoors where early flowers are wanted; space plants 6-in.-12-in. apart.

—roseum. **ACR-2. Pkt. 15c**
This is a very pretty everlasting flower; rose-colored ray with a yellow disk, HHA, 1 ft.

—album. **ACR-3. Pkt. 15c**
A very neat variety with white ray, HHA, 1 ft.

—flore pleno. **ACR-4. Pkt. 20c**
A fine double flowered variety with rose-colored flowers, HHA, 1 ft.

—grandiflorum. **ACR-5. Pkt. 20c**
A much improved type with large flowers in a variety of colors, HHA, 1 ft.

—album flora pleno. **ACR-6. Pkt. 20c**
With double white flowers, HHA, 1 ft.

—Sensation Giants. **ACR-1. Pkt. 15c; ½ oz. 85c**
This strain has flowers fully half again as large as the old type, medium rose to light pink, making beautiful cut flowers and ideal everlasting.

ADENOPHOR.

(ade-e-NOF-oh-rah)

Perennial plants of the Campanula or Bellflower Family and called babybells. They are very little known in the U.S. but are similar to the Campanulas; flowers bell-shaped, nodding, in erect spikes or racemes. Resent being disturbed when once established.

—Bulleyana. **ADEN-1. Pkt. 25c**
Pendulous pale blue flowers on stout leafy stems, HP, 2 ft.

—lilifolia. **ADEN-2. Pkt. 25c**
Has bell-shaped flowers in varying shades of blue, fragrant and borne freely in late summer, HP, 2½ ft.

ADONIS (ah-DOH-nis)

The annuals are hardy, growing well in

shaded locations or under trees. Foliage, dark green, finely cut, terminal flowers solitary crimson or scarlet with a dark colored base, May-June. The perennial

Has a downy white foliage and large umbels of soft lilac flowers, HBB, 2 ft. also desirable as a border plant; yellow flowers in May or June. About 1-ft. tall. Sow seeds of annuals outdoors in late April or a month earlier indoors; the perennial sorts may be sown in spring or fall.

—aestivalis. **ADON-2. Pkt. 15c**
(Summer Adonis). Hardy annual with scarlet flowers, June-Aug.

AETHIONEMA

(ee-thi-o-NEE-mah)

Dwarf and sometimes woody plants of the Mustard Family, called Stonecress and includes annual, biennial and perennial species. They should be grown more, being very similar to the perennial Candytufts, but lasting longer in flower. They enjoy a hot dry situation, do best in a sandy gritty soil. They have little four-petaled flowers usually in charming shades of pink, lilac or purple and white, seldom yellow.

—schistosum. **AETH-2. Pkt. 25c**
Has beautiful rose flowers in spikes; plant bushy habit, HP, 9 inches.

—pulchellum. **AETH-1. Pkt. 25c**
A prostrate habit, free grower and with rose-purple flowers, blooming early in summer, HP, 4 inches.

AGERTUM

A most popular half hardy annual especially used for borders, edging and indoor plant. All are free flowering, the plants covered with flowers from early summer till frost, easily grown in any good soil. Seeds are usually started indoors 4-6 weeks before time to set out—after frost danger. Strains offered are especially selected for uniform growth. In the fall, pot up a few of the smallest plants, cutting them back, and grow on indoors for winter plants. The taller varieties, about 10-12 in. tall, make good cut flowers. The dwarf sorts make ideal rockery plants. When seed is sown outdoors in May, plants flower in August. Rain does not damage the flowers.

—lassecuxi. **AGER-1. Pkt. 15c; ¼ oz. 50c**
Delightful rosy mauve; fine cut flower, 20 inches.

A. MEXICANUM:
Also listed as A. houstonianum. This species includes all the popular varieties of Agertum as follows:

—Blue Ball. **AGER-2. Pkt. 15c; 1/16 oz. 40c**
A deep blue, ball-shaped plants very compact and extra choice, 9-in.

—Blue Bedder. **AGER-3. Pkt. 20c; 1/16 oz. 40c**
A deep lavender-blue on compact 4-in. plants; very pretty.

—Blue Cap. **AGER-4. Pkt. 20c; 1/16 oz. 40c**
Rich blue in close heads, dome-shaped plants, fine for rockery or edging, 8-in.

—Blue Star. **AGER-5. Pkt. 10c; ½ oz. 55c**
A splendid deep blue variety from Holland, fine for edging or bedding, 6-in.

—Fairy Pink. **AGER-6. Pkt. 20c; ½ oz. 55c**
Softest salmon rose-pink, an unusual color in agertums, very pretty for bedding, edging or rockery and also excellent pot plants or window boxes, 6-in.

—Midget Blue. **AGER-7. Pkt. 20c; 1/16 oz. 50c**
Rich blue in a low extra compact uniform plant for edging or bedding, 2-3 in. tall.

—Purple Perfection. **AGER-8. Pkt. 15c; 1/16 oz. 40c**
Deepest blue, plants especially good for bedding and boxes where a 9-in. plant is needed; very free flowering.

—Silver Star. **AGER-9. Pkt. 15c; ½ oz. 70c**
A pretty dwarf white flowered type especially suited for edging, 6-in.

—Swanley Blue. **AGER-10. Pkt. 15c; 1/16 oz. 40c**
Thickly bunched semi-dwarf plants in a pretty shade of azure-blue, 7-in. tall.

—White Queen. **AGER-11. Pkt. 15c; 1/16 oz. 40c**
Pure white flowers on 8-in. plants especially suited for a white agertum in bedding, cut flowers, edging, etc.

—White Beauty. **AGER-12. Pkt. 15c; ½ oz. 60c**
An extra large flowered and the best white in agertums, plants 7-in. tall.

—Zuriblan. **AGER-13. Pkt. 15c**
A beautiful dwarf blue novelty from Switzerland that is claimed to be extra good.

NOTE: Perennial agertums, so called, see Eupatorium and Lonas.

AGROSTIS (ah-GROS-tis)

A group of tufted annual and perennial grasses including some lawn grasses but ornamental grasses as listed here. Known also as Bent Grass.

—nebulosa. **AGRO-1. Pkt. 15c; ¼ oz. 80c**
(Cloud Grass). Hardy annual ornamental grass, fine for edging the flower border; dwarf and neat. Plant indoors early transplanting to beds as wanted, 12-15-in. Especially valued as filled in bouquets of flowers.

ALBISSIA (al-BIZ-iah)
Small shrubs or trees from sub-tropical regions, having graceful feathery foliage and clusters of tassel-like flowers followed by strap-shaped dry pods. They can be grown outdoors in the warm parts of the U.S. and in the greenhouse farther N. Easily grown from seed.

—stipulata. **ALBI-1. Pkt. 25c**

ALLAMANDA (al-ah-MAN-dah)
Shrubs and climbers native of Brazil and grown in the greenhouse in the N. but in for S. they can be planted in the open; have showy purplish or yellow flowers.

—cathartica. **ALLA-1. Pkt. 35c**
(Common Allamanda). Has golden yellow flowers 3 inches across, very pretty vine.

ALLIUM (AL-i-um)

A genus of bulbous flowering plants of the Lily family of which the flowering onion is especially listed here. Most are hardy perennials having flat or tubular leaves, similar, but smaller, to those of the onion. The flowers form at the end of the stems in spherical clusters or slender spikes, in many colors and shades. They do best in rich loamy soil and easily grown from seeds which can be planted any time up to August. Space plants 1 ft. or more apart.

—albo pilosum. **ALUM-5. Pkt. 25c**
—atropurpureum. **ALUM-2. Pkt. 20c**
Flowering stems narrow but hollow, densely flowered, heads about 1-in. across; color blood red; from Himalayas.

—cernuum. **ALUM-3. Pkt. 20c**
Lavender to white flowers, 1-ft. tall, May.

Buds nodding but flowers erect, identified by the crook in the end of the stem.

—karataviense. **ALUM-1. Pkt. 20c**
Lilac-blue flowers in July, 1 ft.

—Rosenbachianum. **ALUM-6. Pkt. 25c**
Large globular umbels of rose-purple flowers, HBB, 3 ft.

—siculum. **ALUM-7. Pkt. 35c**
Umbels of greenish-purple flowers in July, HBB, 1 ft.

—Allium Blend. **ALUM-4. Pkt. 15c**
Contains many species and varieties and of great value to those wishing to grow many types and colors for display or crossing.

NOTE: We should be able to add to the above list, 10-15 more species, but seed delivery was not sure at time of printing.

ALNUS (AL-nus)

The Alder: trees or shrubs with attractive foliage and handsome catkins in early spring. Seed should be sown in spring, only lightly covered, and kept moist and shaded until the seedlings appear; they germinate quite promptly.

ALONSOA (al-on-SOH-ah)

(Mask-Flower). Plants mostly from tropical America and grown in the N. as tender and half-hardy annuals, also as indoor plants. Foliage dark green and bearing an abundance of 2-lipped scarlet or orange flowers, turned upside down. Sow seeds indoors in spring and set out after frost danger is passed; for growing indoors winter sow seeds outdoors in summer and transfer indoors early in the fall; when thus moved they become shrubby and bloom a long time.

—acutifolia. **ALON-2. Pkt. 25c**
A robust species with deep scarlet flowers, (A. myrtifolia), HHA, 2 ft.

—linifolia. **ALON-3. Pkt. 25c**
This is a pretty species with light scarlet flowers in profusion, HHA, 2 ft.

—miniata. **ALON-5. Pkt. 25c**
Fine compact habit and very free flowering; bright scarlet, HHA, 1 ft.

—Mutisii. **ALON-4. Pkt. 25c**
Very pretty; delicate pink with crimson centers, HHA, 1 ft.

—Warscewiczii. **ALON-6. Pkt. 25c**
Bright scarlet and very showy; perennial under glass, HHA, 1½ ft.

—Warscewiczii compacta. **ALON-1. Pkt. 20c**
Very shown, bright scarlet flowers, a perennial if grown under glass. A bushy type, 1-2 ft.

ALSTROEMERIA

(al-stre-MEE-ri-ah)

South American greenhouse plants belonging to the Amaryllis Family and grown from tuberous roots, treated as bulbs. Plant roots deep in rich soil and give a sunny position; they can be grown outside but must be brought indoors before cold weather arrives. Usually seed can be planted in Aug. or later, in pots, which will bloom the following summer in the garden. Sometimes called Herb-lilies.

—aurantiaca. **ALST-1. Pkt. 25c**
Orange, spotted with red, very hardy and free blooming, HP, 3 ft.

—chilensis. **ALST-2. Pkt. 30c**
Comes in beautiful shades of pink, crimson and orange, HP, 2½ ft.

—Ligita. **ALST-3. Pkt. 25c**
Large shall-pink flowers; needs protection in cold climates, HP, 1½ ft.

ALTHAEA (al-THEE-ah)

Annual, biennial and perennial plants found in temperate regions and belonging to the Mallow Family. Easily grown and common in flower gardens; do not confuse with the shrub, Althea. The common Hollyhock belongs here, A. rosea, and is listed in this catalog under Hollyhocks.

—ficifolia. **ALTH-1. Pkt. 25c**
The true fig-leaved Hollyhock, a fine plant with deep yellow flowers, HP, 6 ft.

—ficifolia hybrida. **ALTH-2. Pkt. 25c**
A mixture of colors of this fine single class of Hollyhocks, HP, 6 ft.

—rosea simplex. **ALTH-3. Pkt. 25c**
This is an English grown strain of the finest single varieties and comes highly recommended to us, HP, 6 ft.

ALYSSUM (ah-LIS-um)

(Madwort). They come in hardy annuals and perennials and are exceptionally suited for edging and the rockery in sunny positions. They are all easily grown from seed, the annuals being planted early in the spring or started a month earlier indoors and grown cool. The perennials are planted at any time so that the seedlings can become well rooted before freezing weather. Foliage generally grayish, flowers white or yellow, height not over 1 ft. The perennial sorts bloom very early and they make a brilliant display with their yellow flowers. Both types can also be lifted in the fall and taken indoors for winter flowering.

A. MARITIMUM:

Under this heading are listed the popular varieties of Sweet Alyssum, all hardy annuals, known botanically as Lobelia (loh-beu-LAY-ri-ah) maritima, as follows:

—Carpet of Snow. **ALYS-1. Pkt. 15c; oz. 90c**

Each plant is a flat compact mass of pure snow white flowers and are ideal for low bedding and edging; this is a superior strain, 3-in. tall.

—Snow Cloth. **ALYS-2. Pkt. 15c; ¼ oz. 40c**

A flat compact variety of pure white flowers that give the appearance of a white carpet, 3-in. tall. Space plants about 5-in. apart.

—Little Gem.

ALYS-3. Pkt. 10c; ½ oz. 40c
White flowers, plants 5-6-in. tall and best for tall bedding, boxes or baskets as growth is upright and more open than the compact strains.

—Lilac Queen. **ALYS-4. Pkt. 15c; ½ oz. 40c**
A special compact deep lilac colored strain, 6-in. tall; very pretty.

—Lilac Queen, W-F Strain. **ALYS-5. Pkt. 15c**

—Violet Queen. **ALYS-6. Pkt. 20c; ½ oz. 60c**
The most uniformly deep violet colored strain obtainable; plants compact, fragrant, 6-in. tall.

—Sweet Maritimum. **ALYS-7. Pkt. 10c; oz. 50c**
Very fragrant, for which it is especially planted, flowers pure white, growth spreading, 12-in.; make sweet plants in boxes or baskets.

—Mixed. **ALYS-11. Pkt. 10c; ½ oz. 35c**
Made up of all kinds, low, tall, perennial, etc. Ideal mixture for small children to grow.

—A. Saxatile. Gold Dust. **ALYS-8. Pkt. 15c; ¼ oz. 35c**
Bright golden yellow, blooming so profusely in the early spring as to cover the plants, 12-in. tall, compact habit.

—Silver Queen. **ALYS-9. Pkt. 20c**
Color primrose, an unique color in Alyssum; splendid in the rock garden, 12-in. tall.

—compactum. **ALYS-12. Pkt. 15c; ¼ oz. 35c**

ROCK GARDEN PERENNIAL RARE SPECIES MIXED
ALYS-10. Pkt. 20c; ¼ oz. \$1.50

A beautiful collection of many different shades of yellow on compact plants with foliage from light greenish gray to deep green. An excellent blend for the rock garden or for a hardy Alyssum planting. This is an exceptionally high grade collection and not to be confused with regular mixtures.

—minimum. **ALYS-13. Pkt. 25c**
A very small growing English variety with white flowers, HA, 2 inches.

—repens. **ALYS-14. Pkt. 30c**
A very pretty creeping species with yellow flowers, HP, tr.

—rostratum. **ALYS-15. Pkt. 30c**
A pretty species with yellow flowers in abundance, HP, 1 ft.

—citrinum. **ALYS-16. Pkt. 25c**
Dwarf compact habit and having masses of pale yellow flowers, HP, ½ ft.

—spinosum. **ALYS-17. Pkt. 50c**
This is a very distinct species with a dense spiny growth, white flowers, HP, ½ ft.

AMARANTHUS
(am-ah-RAN-thus)

(Amaranth). The plants grown for garden decorations are valued for their colorful foliage and in some species, for their showy, tassel-like heads. Made up of many red or brownish flowers. The poorer the soil the more brilliant the foliage, in fact rich soil will produce disappointing plants. Start seed out doors in May or June, and thin plants to 18-24-in. apart. They require a sunny place.

—abyssinicus. **AMAR-1. Pkt. 10c**
Very pretty in groups, 5 ft.

—caudatus. **AMAR-2. Pkt. 10c**
(Love-Lies-Bleeding). Has long slender, drooping dark red flower tassels formed in bunches and shown in group plantings, 3-5 ft.

—caudatus viridis. **AMAR-3. Pkt. 15c**
A yellow flowered variety, height 3 ft. Same as A. caudatus but with white drooping flowers, HA, 2 ft.

—cruentus. **AMAR-4. Pkt. 10c**
(Prince's Feather). Red flowers, 3-ft. tall. **Pkt. 15c**

—hypochondriacus. **AMAR-10. Pkt. 20c**
(Princess Feather). Erect spikes of dark purple flowers, HA, 3 ft.

—paniculata, Oeschberg. **AMAR-5. Pkt. 10c**
Erect, dark red flowers, a new sort that should be very good.

—tricolor splendens. **AMAR-6. Pkt. 10c**
(Joseph's Coat). Rich scarlet-crimson foliage prettily variegated yellow and bronze-green; striking in the border, erect, 3-ft.

—Molten Fire. **AMAR-7. Pkt. 15c**
Deep maroon foliage, each branch being tipped a fiery crimson, poinsettia-like, 4-ft.

—Mixed Kinds. **AMAR-8X. Pkt. 10c; ¼ oz. 35c**
Contains all the above sorts with others as received. They should make a good showing in a waste place, that is high, dry and of good soil, such as rubbish dumps, etc.

AMBERBOA (am-bur-BOH-ah)
Annual plants with jaggedly cut or divided leaves and flower heads in purple, blue or pink. They resemble Bachelor Buttons. Very easily grown from seed which should be sown where plants are to flower, HHA. Natives of Spain and Morocco.

—muricata. **AMBR-1. Pkt. 20c**
An easy growing, long blooming, free flowering half hardy annual; 3-in. lace stars of pale purple with creamy centers; cuts well and does best in dry soils, sow seeds in position.

AMMOBIUM (a-MOH-bi-um)
These are annual Australian plants grown as everlastings. They prefer definitely a sandy soil. Very easily grown; bears a profusion of small white flowers having yellow centers which brighten the garden. Seed can be sown in spring early or in fall for early start. If cut before they are in full bloom the flowers will remain white; hang in a shady airy place to dry; if cut later the flowers become yellowish. They make good everlastings.

—alatum. **AMOB-1. Pkt. 20c; ¼ oz. \$1.00**

AMSONIA (am-SOH-ni-ah)
Perennials, 1-3-ft. tall, having bluish flowers followed by rather attractive milk-weed-like pods. Can be planted in border or amongst shrubs. Easily grown from seed.

—tabernemontana. **AMON-1. Pkt. 15c**
A very desirable perennial tolerant to both sun and shade; has good foliage and

flowers; stems willowy, each ending in large panicles of starchy blossoms in soft blue. Use some winter protection north of Ohio.

ANACYCLUS

—depressa. **ANAC-1. Pkt. 30c**
Rose tinted white flowers gray ferny-like foliage, easily grown in ordinary garden soil, HP, ½ ft.

ANAGALLIS (an-ah-GAL-is)

Low growing annuals, biennials and perennials having pretty little star-like flowers in red, blue or white which grow out of the axils of the leaves on hair-like stems; very free flowering, and some species are especially fine for the rock garden. The annuals can be sown where they are to grow, and the perennials any time up to August. They do best in a loose warm soil.

—Giant Flowering Mixed. **ANAG-1. Pkt. 10c**

A large flowering strain in all the colors and fine for the rockery, beds or baskets, HA, 6-in. tall.

- demissa*. **ANEM-15. Pkt. 25c**
Wind Flower. White flowers, 16-24-in. tall, long seed head. Most attractive part being the cylindrical head of fruit, prefers dry soil, May-July. Native of Mont.
- globosa*. **ANEM-12. Pkt. 25c**
Native of Mont. Round seed head, bronze-green, 15-in. tall, May-July.
- patens nuttalliana*. **ANEM-13. Pkt. 25c**
Good. Pasque Flower. Purple flowers in early spring before even its own woolly leaves unfold; easy as it is good, 6-10-in. tall, April-May.
- pulsatilla*. **ANEM-10. Pkt. 20c**
Violet flowers, likes chalky soils, pretty spring flowering.
- rivularis*. **ANEM-24. Pkt. 30c**
One ft. plant with white flowers and blue anthers, very free flowering and very desirable.
- sulphurea*. **ANEM-8. Pkt. 20c**
Pale yellow flowers; alpine type.
- letraspala*. **ANEM-17. Pkt. 25c**
Pkt. 10c; 1/2 oz. 40c
Robust white flowered species of great interest.

- magellanica*. **ANEM-21. Pkt. 25c**
A charming species from the Straits of Magellan having sulphur-yellow flowers, HP, 2 ft.
- Mrs. van der Elst*. **ANEM-22. Pkt. 50c**
A very rare form of this species in a beautiful rose color, HP, 1 ft.
- rubra*. **ANEM-25. Pkt. 25c**
A very fine English form with deep red-purple flowers, HP, 1 ft.
- virginiana*. **ANEM-19. Pkt. 25c**

ANODA LAVATEROIDES

- hasitata*. **ANOD-3. Pkt. 30c**
A handsome plant with glaucous foliage and lovely pink flowers, HA, 10 ft.
- Opalcup*. **ANOD-1. Pkt. 15c**
In continuous bloom from June-Nov. strikingly lustrous flowers with shallow cups in opaline tones that lie between blue and pink. Quick and easy grower, 3-ft. tall, HA.
- Snowcup*. **ANOD-2. Pkt. 15c**
Flowers shining new-snow-whiteness—no whiter flower. Plants are particularly even, dense and formal in growth and out line on all summer bloomer, 30-in. tall, HA.

ANTENNARIA (an-te-NAY-ri-ah)

- (Everlastings or Pussy-Toes). Perennials planted in the wild or rock garden and also for dried winter bouquets. Grow in poor soil and easily propagated by seeds. The white-wooly leaves are clustered at the base of the stem and flowers are in heads.
- parica*. **ANTA-1. Pkt. 25c**
Dense low mats of woolly leaves with relatively large white or pink heads, height 6 inches or less.
- rosea*. **ANTA-2. Pkt. 25c**
Grows to 1 1/2-ft. tall and spreads by means of underground stems; foliage distinctly white-wooly and the bracts of the flower heads are rose colored.

ANTHEMIS (AN-the-mis)

- (Golden Marguerite, Chamomile). Very free flowering perennials with daisy-like flowers, blooms June-Sept. Does well on dry sandy soils and in full sun. Especially good for cut flowers. Sow seed in late April or early May, outdoors, or they can be started earlier indoors. Thin plants in garden to 10-in. apart. Profuse bloomers from June-Sept.
- arabica*. **ANTH-3. Pkt. 20c**
A first class annual; pretty golden-yellow flowers, HA, 15 inches.
- kelwayi*. **ANTH-1. Pkt. 10c**
Pure golden yellow blooming July to frost, slightly aromatic odor; attractive foliage; excellent cut flower, 30-in.
- montana*. **ANTH-4. Pkt. 25c**
Charming specimen producing pure white flowers in abundance, HP, 1 ft.
- nobilis*. **ANTH-5. Pkt. 25c**
(Chamomile). The well known medicinal herb; white flowers, HP, 18 in.
- Perry's Variety*. **ANTH-6. Pkt. 30c**
A bright lemon colored variety of this useful border plant; fine for cut flowers, HP, 2 ft.
- linctoria*. **ANTH-2. Pkt. 10c**
Golden yellow ray flowers, excellent for mass plantings and for cutting, 2-in. across, 2 1/2-ft. tall.

ANTHERICUM (an-THER-i-kum)

- Tuberous-rooted herbs of the Lily Family having racemes of small white lily-like flowers and long narrow grassy leaves. Common names, St. Bernard's Lily, St. Bruno's Lily. In the North they require protection and they also make fine cool greenhouse plants or for use in lawn vases in the summer. They require a plentiful supply of water when blooming.
- liliago*. **ANTE-1. Pkt. 50c**
A very neat species with small white flowers, HP, 18 in.
- lilicstrum majus*. **ANTE-2. Pkt. 50c**
(St. Bruno's Lily). Pure white lily-like flowers, HP, 2 ft.

ANTHOLYZA (an-thot-LY-zah)

- A South African genus of leafy stemmed plants of the Iris Family, growing from corns and resemble Gladiolus, both in growth and culture. For real early flowers they can be started inside and set out about June 1st. Bloom in summer.
- paniculata*. **ANLZ-1. Pkt. 40c**
Mentibetia-like plant with flat panicles of orange-red flowers, HP, 2 1/2 ft. Treat as an annual.

ANTIGONON (an-TIG-oh-non)

- A tender climber grown in the N. as a greenhouse vine but in the S. it is a popular hardy climber where it has a long blooming season, grows 30 ft. in good soil. In greenhouse it requires plenty of light and not too much root room. During summer it requires plenty of water and liquid manure if confined to tubs or pots. The tuberous root must be kept dry during its resting period during winter.
- lepopus*. **ANTI-1. Pkt. 15c**
Racemes of handsome rose-pink flowers.

APHANOSTEPHUS

- skirrobasis*. **APHN-1. Pkt. 25c**
Called Pink-and-White Daisy or Lazy Daisy. The flowers are flat daisies an inch or over across, center tiny, petals very many, narrow, overlapping. Above the petals are pure white, but the reverse of the flower is soft pink, and the unopened buds are pure pink. The pink and the

ANTIRRHINUM

Snapdragons are popular cut flowers both in the garden and the greenhouse. Early flowers can be had by starting them indoors in February or later on till mid-April. They are tender perennials but must be grown as annuals. The seed being small, care should be used in germinating them, they may be slow. A. magus, known generally as the Snap-dragon is the most important species. Set plants outdoors as soon as frost danger is past. For winter bloom indoors sow seed in the open in August and transplant seedlings into pots; in more mild climates, these plants can be mulched and carried over outdoors for earlier spring flowers. Pinch out central bud when transplanting to encourage flowers on side branches.

ALL RUST RESISTANT STRAINS.

- maius gr. fl. Giant Flowered Hybrids*. **ANTR-1. Pkt. 25c; 1/16 oz. 40c**
This is a special strain of exceptionally nice flowers and colors, on robust plants, 2 1/2-ft.
- Large Flowered Hybrids*. **ANTR-2. Pkt. 20c; 1/16 oz. 35c**
2 1/2-ft. in brilliant colors.
- California Giants, Mixed*. **ANTR-3. Pkt. 20c; 1/16 oz. 35c**
2 3/4-ft. tall, taller than *maius* group and the individual flowers larger.
- nanum, gr. fl. Mixed*. **ANTR-4. Pkt. 15c; 1/16 oz. 25c**
Large flowered, half dwarf plants, excellent for bedding or cutting.

white, together with the golden flower centers, give pretty tricolor effects. Foliage is narrow and scanty, hidden from June through Sept. by the masses of flowers. 20-inches. It cuts. Easy grower.

AQUILEGIA (ak-wi-LEE-ji-ah)

(Columbine). One of the most valuable of hardy perennials. Its foliage is attractive, and the pretty spurred flowers cannot be equalled for colors. They bloom early in the summer. Seed can be sown any time so as to get the seedlings set out by Sept. to get established before freezing weather. Seeds are sometimes slow to out should be given partial shade. Bone meal or well rotted manure in rich soil produces wonderful plants. We offer many rare and high class strains.

- alpina*. **AQUI-1. Pkt. 20c**
Excellent rock garden species, deep blue flowers in summer; 1 1/2-ft., short spurred.
- alpina*. **AQUI-1T. Pkt. 35c**
An English grown strain of this excellent rock garden type and which we list separately from the American grown strain for those wishing the English.
- chrysantha*. **AQUI-2. Pkt. 20c; 1/16 oz. 40c**
(Golden Columbine). Tall branching, yellow flowers, with long spurs, May-August, 3-ft.
- Silver Queen*. **AQUI-4. Pkt. 20c**
Large flowered, white flowers.
- clematiflora hybrids*. **AQUI-13. Pkt. 50c**
Distinct in petal formation and something different; comes in bright colors, HP, 1 1/2-ft.
- coerulea*. **AQUI-3. Pkt. 25c**
(Colorado or Rocky Mountain Blue Columbine). 2-ft. tall, large, showy blue flowers, April-July.
- Crimson Star*. **AQUI-6. Pkt. 25c**
Combination of rich crimson outer petals with a pure white center, 1 1/2-ft. tall. Very pretty.
- ecalcarrata*. **AQUI-14. Pkt. 50c**
A spurless species with pale brown flowers, HP, 1 ft.
- flabellata*. **AQUI-15. Pkt. 35c**
A very pretty species, dwarf habit and pure white flowers, early, HP, 1 ft.
- hybrida, Monarch*. **AQUI-16. Pkt. 30c**
A popular mixture in great variety of colors and long spurs, English grown, HP, 2 1/2 ft.
- Kashmir Form*. **AQUI-17. Pkt. 50c**
Pale blue or pink flowers, HP, 1 1/2 ft.
- Mac's Long Spurred*. **AQUI-19. Pkt. 25c**
This is a strain grown by one of the leading seed growers in this country and comes highly recommended for brilliant colors and long spurred flowers.
- Edelweiss*. **AQUI-5. Pkt. 20c**
Snow white flowers in May.
- longissima*. **AQUI-12. Pkt. 25c**
Large bright yellow flowers with extra long spurs 4 inches in length, 2 1/2-ft. tall.
- Mrs. Scott Elliott Hybrids*. **AQUI-7. Pkt. 25c**
This is a wonderful strain with the most beautiful color combinations through shades of lavender, orchid, mauve, blue, purple, yellow, pink, reds, etc., with beautiful pastel shades predominating, spurs and flowers very large.
- Mrs. Scott Elliott*. **AQUI-7T. Pkt. 50c**
Another English grown strain of this beautiful hybrid and which we list separately for those wishing to try either strain.
- Blue Shades*. **AQUI-8. Pkt. 35c**
This is the finest strain in existence and in a most pleasing blend of blue shades, 3-ft. long, spurred.
- Mrs. Nicholls Hybrids*. **AQUI-9. Pkt. 25c**
A glorified caerulea with large flowers and long spurs, especially good in blue. Very choice.
- W-F Hybrids*. **AQUI-10. Pkt. 35c**
This blend of hybrids can not be equalled and contains many unique colors. It is highly recommended.
- Saier's Long Spurred Blend*. **AQUI-11. Pkt. 30c**
This is a carefully hand made blend of all the best long spurred varieties, and it will produce the most wonderful display of Columbines you have ever seen.
- NOTE: We should be able to add at least 25 more species and varieties to the above list as the season advances.
- vulgaris gr. fl. alba*. **AQUI-18. Pkt. 30c**
Munstead White. A very fine strain of the common Columbine in a pure white form.
- stellata simplex*. **AQUI-20. Pkt. 50c**
A spurless species, similar to Clematiflora and in various colors, HP, 1 1/2 ft.

- Super Majestic Mixed*. **ANTR-5. Pkt. 20c; 1/16 oz. 50c**
This cannot be equalled for all around use. It is a fine strain in half dwarf plants with as many as 20 spikes per plant, 2-2 1/2-ft. tall, cutting and garden display.
- Prince of Orange*. **ANTR-7. Pkt. 25c**
A brilliant gold and orange, 2 1/2 ft.
- Queen Victoria Improved*. **ANTR-9. Pkt. 25c**
The finest tall pure white Snapdragon, 2 1/2 ft.
- Rose Queen*. **ANTR-9. Pkt. 25c**
Large spikes of very bright rose color, 2 1/2 ft.
- Torchlight*. **ANTR-10. Pkt. 25c**
Terre cotta producing the most brilliant effect, 2 1/2 ft.
- Yellow King*. **ANTR-11. Pkt. 25c**
A very fine deep yellow in a large flowered strain, 2 1/2 ft.
- asarina*. **ANTR-12. Pkt. 35c**
Trail habit, large pale yellow flowers and cordate foliage, HHP*, best grown as an annual, 6 in.
- Rock Garden Hybrids, Magic Carpet*. **ANTR-6. Pkt. 40c**
A wonderful collection of Snapdragons, 6 inches tall, in every color combination and suited for edging or for the rock garden.
- Rock Hybrids*. **ANTR-13. Pkt. 50c**
This is an English grown strain or blend and of reselected types, coming highly recommended, HP, 6 inches.

- Skinneri*. **AQUI-21. Pkt. 30c**
A very distinct and desirable species with crimson-red flowers having a greenish mouth, HP, 2 ft.
- Torkington's Double*. **AQUI-19. Pkt. 75c**
A beautiful selection of double flowers in a great variety of colors; an English grown variety, highly recommended, HP, 2 1/2 ft.

ARABIS (AR-ah-bis)

- (Rock Cross). Annuals, biennials, and perennials including many very pretty low growing border and rock garden plants all easily grown. They flower very freely in pink, white or purple flowers in April, May and into early summer. Prefer a sunny place but tolerates some shade. Light sandy soil is best, and bone meal worked around the plants benefits them greatly. The foliage is also attractive later in the summer. Sow seeds in late April or early May, out doors or the perennials can be started up to August when the plants should be set out by Sept. Space plants 6-in. apart.
- alpina*. **ARAB-1. Pkt. 15c; 1/4 oz. 30c**
This is a dwarf compact strain, forming spreading tufts covered with sheets of pure white flowers soon after snow disappears; one of the earliest plants to flower, HP, 6-in.
- grandiflora*. **ARAB-6. Pkt. 25c**
A much larger white strain and a great acquisition, HP, 6 inches.
- rosea*. **ARAB-2. Pkt. 25c**
A very pretty bright rose colored strain of A. alpina and with its form of growth, silver-gray foliage.
- Fruhlingsschauber*. **ARAB-3. Pkt. 25c**
A carnation-rose strain from Switzerland flowering in May.
- Schneehaube*. **ARAB-4. Pkt. 25c**
A white strain from Switzerland, very early.
- Saier's Arabis Blend*. **ARAB-5X. Pkt. 20c; 1/4 oz. 30c**
This is a carefully hand made blend of the above with others included. A beautiful collection of plants can be secured from this blend with little cost.

ARACHNANTHE

- (ah-rak-NAN-the)
Very showy climbing arches, with large flowers borne in drooping panicles up to 3 ft. in length, with as many as 50 blooms of red, orange, crimson or yellow flowers. They require same treatment as Vanda; see orchids for proper culture.
- cathartii*. **ARAC-1. Pkt. 75c**
Large fleshy flowers of dark red, banded with yellow, (Coelogyne).
- barbata*. **ARAC-2. Pkt. 75c**

ARCTOTIS (ahrk-TOH-tis)

- Attractive daisy-like half hardy annuals that are especially valuable for cut flowers. The flowers close during the night. They can be planted in any part of the garden and grow luxuriously in good soil and a sunny position. They are quick to germinate and grow, producing flowers all summer and fall; when cut they last 7-10 days with the buds even opening when in the sun. Undeveloped buds can be cut and when placed in water indoors in a sunny window they open into perfect flowers. Start seed either indoors in late March or April or outdoors in late May.
- Large Flowered Hybrids*. **ARCT-2. Pkt. 20c**
Extra large flowers in an attractive array of many shades of yellow, orange, bronze, red and lavender; almost constantly in bloom, colorful in beds or borders, 1-ft.
- scapigera*. **ARCT-3. Pkt. 20c**
Red and orange shades.
- Mixed Arctotis*. **ARCT-4. Pkt. 10c**
Mixture of above kinds and others as received.

ARDISIA (ahr-DIZ-i-ah)

- Large genus of ornamental evergreens from tropical regions and grown only in the greenhouse in the U.S., where they make pot plants; seeds germinate readily.
- macrocarpa*. **ARDS-1. Pkt. 50c**
- arenaria*. **AREN-3. Pkt. 30c**
(Sandworts). So called because they prefer a sandy soil; a large group of low growing annuals and perennials including many high altitude alpine plants. Habit of growth is in dense mats, picturesque tufts or graceful trailing creepers which are excellent for carpet bedding or in the rock garden. The soil should be light and well drained.
- balcarica*. **AREN-3. Pkt. 30c**
Very neat species with close tuft-like habit and small white flowers, HP, 2 inches.

- juniperina*. **AREN-4. Pkt. 30c**
White flowers very freely produced, HP, 4 inches.
- lithophila*. **AREN-1. Pkt. 25c**
1/4 oz. 30c
Very good, native of Mont., white flowers, 6-8-in. tall, April-May.
- montana*. **AREN-2. Pkt. 20c**
Pure white flowers, HP.
- purpurascens*. **AREN-5. Pkt. 35c**
Prostrate habit, lilac flowers and a fine rock garden plant, HP, tr.

ARGEMONE (ahr-je-MOH-ne)

- (Mexican or Prickly Poppy). A free flowering hardy annual with large Poppy-like flowers in white, yellow and purple. Plants 2-4-ft. tall and should be set 10-in. apart for a hedge which is very pretty when topped with its beautiful flowers. Good in any soil in a sunny position. They resent transplanting, so sow seeds where they are to grow during April. They flower all summer.
- grandiflora alba*. **ARGE-2. Pkt. 15c**
Very large flowered pure white, foliage white marbled. They would look fine in a hedge or large group.
- platyceras rosea*. **ARGE-1. Pkt. 15c**
An easy annual in bloom for months with big Poppy-like flowers that range from pale bluish, thru rose, to smoky crimson. Try it as a hedge or as plants in the border.
- Argemone Blend*. **ARGE-3X. Pkt. 15c; 1/2 oz. 80c**
Pure white, cream, pale yellow, golden, bluish, silvery rose and crimson. Mostly single, but a proportion will carry double fringed flowers. Note particularly the range of coloring in our strain, exceeding that of most others.

ARISAEMA (ar-i-SEE-mah)

- Tuberous rooted perennials belonging to the Arum group. The common Jack-in-the-Pulpit belongs to this group. A moist shady place is required, and some can be grown in pots in loam and peat mixture.
- griffithii*. **ARIS-2. Pkt. 25c**
Spathe hood-like, brown violet with green. Very picturesque and curious, resembling the head of a cobra.
- speciosum*. **ARIS-1. Pkt. 25c**
Spathe glossy purple, greenish and white.
- Arisaema Blend*. **ARIS-3. Pkt. 20c**
A blend of above sorts with others as received.

ARNICA (AR-ni-ka)

- Perennial plants of Composite Family with clustered basal leaves and bright yellow flowers on long spikes, they are effective in colonies in the wild garden growing rapidly in any acid soil and multiplying rapidly.
- cordifolia*. **ARNI-2. Pkt. 20c**
Yellow flowers, 8-12-in. tall, April, native of Montana.
- montana*. **ARNI-1. Pkt. 15c**
Mountain Tobacco. An old world plant, 2-ft. tall and source of the medicinal tincture of arnica. Large heads of yellow ray and disc flowers, 3-4-in. clusters, thriving in sunny position.

ARTEMISIA (ahr-tee-MIZ-i-ah)

- (Wormwood). Hardy aromatic plants, mostly perennials or small shrubs. The flower is in heads and composed entirely of tubular disk flowers. Grown mainly for their aromatic and medicinal qualities and many fine for background planting in border or as cut flowers. Species vary greatly but do well in average soil. Heights 6 inches to 12-ft. Flowers August thru September.
- sacrorum viridis*. **ARTE-1. Pkt. 20c**
(Summer Fir). Fast growing foliage plant with fine leaves and close pyramidal growth 3-5-ft., splendid for groups or specimen plants. Hardy Annual.
- vulgaris*. **ARTE-2. Pkt. 20c**
Erect growing, with leaves green above and white cottony beneath; heads of yellowish flowers freely produced.

ASCLEPIAS (as-KLEE-pi-as)

- (Silkweed). Perennials, many having gay flowers and attractive seed pods, easily grown in border or wild garden.
- curassavica*. **ASCL-1. Pkt. 20c**
(Brazilian Butterfly Flower). Oddly formed flowers, buff-gold with scarlet centers, the buds like burnished coral. A profuse, long bloomer in the summer garden. seeds sown right where it is to stand, but also sometimes grown as an everblooming pot plant. An excellent cut flower, 1 1/2-ft. tall.
- syriaca*. **ASCL-2. Pkt. 20c**
Perennial.
- tuberosa*. **ASCL-3. Pkt. 20c**
Orange-red flowers, July-Aug. HP.

ASPARAGUS

- Perennial plants, shrubs and vines, most of which are grown as tender plants.
- plumosus nanus*. **ASPG-1. Pkt. 25c; 1/2 oz. 33.00**
Twining vine grown under glass in the N. but out doors in Fla. It is the favorite florist green.
- sprengeri*. **ASPG-2. Pkt. 25c; 1/2 oz. 33.00**
The most satisfactory for a house plant, easily grown from February sown seeds, taking about 30 days to germinate. Old established plants produce open racemes of small pinkish, fragrant flowers in May or June and coral-red berries about Xmas time.

- rocamosa*. **ASPG-3. Pkt. 25c**
Tall climbing under shrub with handsome foliage, dense sprays of flowers.
- asperula*. **ASPR-1. Pkt. 15c**
Pretty blue flowers, effective in carpeting, 1-ft., HA.
- tinctoria*. **ASPR-2. Pkt. 25c**
Procumbent growth; flowers white, red outside, HP, 1 ft.

ASPHODELUS (AS-toh-del-us)

- Member of the Lily Family and closely related to Asphodeline, having fleshy roots, narrow leaves and lily-like flowers, hardy. Easily grown, preferably in rich sandy loam. These have leafless flower stems, with the leaves clustered at the base.
- alpinus*. **AST-19. Pkt. 15c**
A perennial rock garden species, violet-blue daisy-like flowers on 6-in. plants, in early summer.
- Wargrave Pink*. **AST-33. Pkt. 35c**
Delicate lilac-pink variety with large flowers; an English grown strain, HP, 6 inches.
- Large Flowered*. **AST-20. Pkt. 15c**
New larger flowered type in mixed colors for rock garden.
- superbus*. **AST-23. Pkt. 20c**
Very pretty rock garden species.
- commutis crassulus*. **AST-22. Pkt. 15c**
Small flowered Mont. native species, drought resistant, white, 2-ft., Aug.
- cordifolius*. **AST-35. Pkt. 40c**
Has graceful sprays of small mauve flowers, HP, 1 ft.
- farrei*. **AST-24. Pkt. 20c**
- Hardy Alaskan*. **AST-31. Pkt. 25c**
A Michaelmas Daisy native to Alaska, 12-24 inches tall and should be useful for hybridizing as well as for the Alaska type.

ASTERS**CHINA OR COMMON GARDEN ASTER:**

Sow seeds indoors 6 weeks before time to set out in their beds which is after danger of frost has passed. Do not crowd, usually a foot apart and use care that they do not suffer a set back thru over watering, crowding or draught. It is best to transplant the seedlings once, As the roots of Asters are shallow, use care in cultivating. Make succession plantings for continuous flowering periods, but when possible use different types which flower at different times. All strains offered are wilt resistant unless especially noted.

- Single, Choice Mixed*. **AST-1. Pkt. 10c**
- Imp. Giants of Cal., Mixed*. **AST-2X. Pkt. 15c; 1/4 oz. 90c**
Flowers are large and full, crego-type, on long heavy non-lateral stems, 3-ft. tall, blooming late summer until frost; fine cut flower for florists.
- Cal. Giant Sunshine*. **AST-3. Pkt. 15c; 1/4 oz. 90c**
Fascinating new Aster type, called most beautiful in the world, 4-5-in. across composed of a single row of loosely placed outer petals which contrast with the unique yellow quill-like center; 2-3 ft. tall, early to mid-September.

- Crego, Imp. Mixed*. **AST-4. Pkt. 10c; 1/4 oz. \$2.00**
Wilt resistant, plants 2 1/2-ft. tall, branching, flowers double, not rounding, petals twisted, excellent cut flower, mid-Sept.
- Early Beauty, Mixed*. **AST-5. Pkt. 15c**
Wilt resistant. Flowers with Crego. Plants 2 1/2-3-ft. tall, with large well formed flowers, excellent cut flowers.

EARLY GIANT.

- Wilt resistant. Finest large flowered, heavy stem W.R. Aster yet developed; flowers large Giants of Cal. type, 1 1/2-ft. tall. Early blooming 4-6 weeks earlier than Giants of Cal. or mid-Aug.
- Light Blue*. **AST-6. Pkt. 15c; 1/4 oz. \$1.00**
- Rose Marie*. **AST-7. Pkt. 15c; 1/4 oz. \$1.00**
- Mixed*. **AST-8X. Pkt. 15c; 1/4 oz. 85c**

- Early Royal, Mixed*. **AST-9X. Pkt. 15c; 1/4 oz. 70c**
Wilt resistant. Branching, 1 1/2-2-ft. tall, mid-Aug., directly following Queen of the Market.
- King or Needle Type, Mixed*. **AST-10X. Pkt. 10c; 1/4 oz. 80c**
Flowers are composed of twisted quill-like petals making a very attractive flower.

- Late Branching, Mixed*. **AST-11X. Pkt. 15c; 1/4 oz. 50c**
Wilt resistant. 2 1/2-3-ft. tall, branching, large double flowers, early Sept.
- Heart of France*. **AST-12. Pkt. 15c; 1/4 oz. 90c**
Wilt resistant. Brilliant red, medium sized flowers, 1 1/2-2-ft. tall, late Aug.

SUPER GIANTS OF CALIFORNIA.

- This is the largest and most fully double Aster class known; flowers 6-8-in. across, full petaled, graceful, interlacing petals. Plants 2 1/2-ft. tall, 6-8 long, non-lateral stems per plant.
- Los Angeles*. **AST-13. Pkt. 25c; 1/4 oz. \$1.20**
Shell pink.
- El Monte*. **AST-14. Pkt. 25c; 1/4 oz. \$1.20**

- Pom Pom, Mixed*. **AST-15. Pkt. 10c; 1/4 oz. 50c**
Medium high and very early, medium sized round flowers.
- Princess, Mixed*. **AST-16. Pkt. 15c; 1/4 oz. \$1.20**

- Wilt Resistant. Attractive new cutting type, 2-2 1/2-ft. tall, branching, early, 3-3 1/2 inch flowers on strong stems and with full deep crested centers surrounded by several rows of dainty plume-like guard petals.
- Queen of the Market, Mixed*. **AST-17. Pkt. 10c; 1/4 oz. 60c**
Wilt resistant. Very popular early flowering asters, branching, 20-in. tall, early August, one of the most useful for the early cut flower market.

- Ballet Queen*. **AST-18. Pkt. 15c; 1/4 oz. 75c**
Wilt resistant. A fascinating shade of deep salmon-rose, 3 1/2-in. flowers generously borne on 15-20-in. plants; extremely wilt resistant and unsurpassed for cutting or border plantings.

NOTE MARKET GARDENERS: Those wishing larger quantities than 1/4 oz. may take a 25% discount from the 1/4 oz. price for quantities of 1-3 oz., and 33 1/3% discount on 1/4-1 1/2 lb. lots. For large quantities it will pay you to not only write for quotations but to book your order very early.

PERENNIAL SPECIES OF ASTERS.

- alpinus*. **AST-19. Pkt. 15c**
A perennial rock garden species, violet-blue daisy-like flowers on 6-in. plants, in early summer.
- Wargrave Pink*. **AST-33. Pkt. 35c**
Delicate lilac-pink variety with large flowers; an English grown strain, HP, 6 inches.
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New larger flowered type in mixed colors for rock garden.
- superbus*. **AST-23. Pkt. 20c**
Very pretty rock garden species.
- commutis crassulus*. **AST-22. Pkt. 15c**
Small flowered Mont. native species, drought resistant, white, 2-ft., Aug.
- cordifolius*. **AST-35. Pkt. 40c**
Has

Hybrids. AST-25. Pkt. 15c

Especially large flowered.

—hybridus. AST-34. Pkt. 30c
This is an English grown strain of these hybrids, which we offer separately; this strain is from the best named varieties, HP, 6 inches.

—hybrida nana. AST-36. Pkt. 40c
A wonderful new dwarf race of Asters having masses of blue, white, rose and pink flowers, HP, 6 inches.

—Novi-Belgii. AST-38. Pkt. 50c
Another T&M English strain, seed saved from the very best English red and blue named varieties, HP, 1 ft.

—Novae Angliae. AST-37. Pkt. 50c
A T&M strain of this beautiful native, seed saved from the best-named varieties, grown in England, HP, 4 ft.

—pyrenaicus. AST-39. Pkt. 50c
A dwarf species with large blue flowers, HP, 1 ft.

—sikkimensis. AST-30. Pkt. 15c
Much branched, heads tufted with many small corymbs in autumn and found in high pastures in Himalayan Mts.

—subcoeruleus. AST-27. Pkt. 20c
(diplotrichoides). In every respect a quite distinct variety 12-in. tall with brilliant violet flowers of good size, end of May to end of June.

—Star of the Wartburg. AST-28. Pkt. 25c
NEW. Giant flowered cutting perennial Aster with bright lavender flowers, 2½-ft. tall.

—Perennial Aster Blend. AST-29X. Pkt. 15c; ¼ oz. \$1.25
Extra choice blend containing not only the above kinds but also many others.

—Marguerite, Elegance. AST-60. Pkt. 25c

(Callistephus sinensis). Single mixed flowers, tall growing; very useful for border growing and for cutting, branching habit and free flowering, HHA, 2 ft.

—Southcourt Beauty Mauve. AST-61. Pkt. 25c
Mauve flowers, tall branching habit, long stiff stems, and highly recommended for cutting, HHA, 2½ ft.

—Apple Blossom. AST-62. Pkt. 25c

—Lavender Queen. AST-63. Pkt. 25c

—Royal Mauve. AST-64. Pkt. 25c

—White Swan. AST-65. Pkt. 25c
The above named varieties of large flowering single Marqueterie Asters are very highly recommended for cutting and we list these varieties especially for those who wish to try them out for this purpose. They are English grown and you will find them the best of autumn cut flowers, HHA, 1½ ft.

ASTILBE (a-STIL-be)

(Spirea of the florists). Easily grown herbaceous plants with long and showy plumes of white to red flowers, in summer; easily forced in winter. Quite easily grown from seed which leads to considerable variation among the plants; sow in early spring in soil containing sand and peat or leaf mold.

—rivularis. ATIL-1. Pkt. 30c
White flowers in long graceful panicles, 3-5 ft. tall.

ASTRAGALUS

(as-TRAG-ah-lus)

Milk Vetches. Plants of the Pea Family having deeply cut leaves and purple yellow or white flowers in spikes or racemes. Thrive in light sandy soil. They are related to Oxythorps.

—purshii. ASTR-1. Pkt. 25c
Nearly prostrate, dense woolly finely divided leaves; pea-flowers of yellow with keel purple tipped. For sunny rock garden.

ASTRANTIA (as-TRAN-shi-ah)

Perennial Eurasian plants belonging to Parsley Family; leaves deeply lobed and the flowers come in flattened clusters. Common name Masterworts.

—major. ASTN-1. Pkt. 35c
A very fine border or rock garden plant with pretty roses and white flowers, does well also along moist shady woodland walks, HP, 2 ft.

AUBRIETIA (au-BREE-shi-ah)

(False or Purple Rock-cress). Low growing perennial and an excellent spreading plant for borders, beds or rockery doing well in semi-shade and with their attractive silvery green foliage covers space in the beds; flowers grow in masses in spring and early-summer and combined with Alyssum or Arabis, make a beautiful display. Sow seeds any time up to Aug. for plants to flower the following spring.

—Barker's Double. AUBR-8. Pkt. 50c
A semi-double deep rosy-purple flowered variety, HP, tr.

—eryii. AUBR-2. Pkt. 20c
Most beautiful blue.

—Crimson King. AUBR-9. Pkt. 35c
A very pretty crimson shade, HP, tr.

—Giant Hybrids. AUBR-3. Pkt. 20c
A most dainty and beautiful creeping sort for carpeting beds or the rockery with its brilliant carpet of blue, crimson or rose, lasting for weeks; a gem for crevice planting in rocks or walls, 6-in. The giant hybrids are vastly superior to the regular strains in both size and color range.

—Gloriosa. AUBR-10. Pkt. 40c
A beautiful large rosy pink variety, English grown, HP, tr.

—graciosa. AUBR-5. Pkt. 20c
A dwarf light blue, trailing habit.

—hybride Monarch Strain. AUBR-11. Pkt. 60c

A new English grown strain of Aubrietia, well recommended, HP, tr.

—semi-double. AUBR-12. Pkt. 60c

An English grown strain, seed from semi-double varieties and in many different shades, HP, tr.

—leicathini. AUBR-6. Pkt. 20c
Deep purple rose.

—Mrs. Lloyd Edwards. AUBR-13. Pkt. 50c

A beautiful violet-purple variety from England, HP, tr.

—rosea splendens. AUBR-14. Pkt. 50c
One of the best; large bright rose colored flowers, HP, tr.

—Vindictive. AUBR-15. Pkt. 50c
One of the finest of the large flowering English varieties; violet-red flowers, HP, tr.

Aubrietia Blend. AUBR-7X. Pkt. 15c

A carefully made blend of many varieties and species for the flower grower wanting to grow for observation many different kinds.

AUCUBA (AU-keu-bah)

Evergreen shrubs with large ornamental leaves withstanding a smoky atmosphere; tolerant of shade. Not reliably hardy N. of D.C. Grown in tubs or pots in N. where it makes a beautiful porch or terrace decoration. For a display of the attractive scarlet berries the female flowers must be fertilized by the male plants. To winter plants, keep in cool place and plants on dry side.

—himalaica. ACUB-1. Pkt. 25c

Very similar to A. himalaica. tubers. They are nice plants in dry places in the wild garden.

—aureo maculata. ACUB-3. Pkt. 50c
Very attractive shrub with golden variegated foliage, HSH, 4 ft.

AZALEA (ah-ZAY-le-ah)

Azaleas are among the most beautiful flowering shrubs and range in all heights up to 20 ft. and in many beautiful colors. They require a deep rich acid soil and as they are a kind of Rhododendron, they do best with their culture, which see. It is best to start them in frames and later in pots and when established, they can be set out in their permanent locations. While many are not hardy in the North, there are many sorts that are.

—Pontica. AZAL-1. Pkt. 50c
Yellow flowers and bushy habit, 6 ft.

—mollis. AZAL-2. Pkt. 50c
A spring flowering deciduous species in mixture, 4 ft.

BALSAMORRHIZA

(bahl-sam-oh-RYZ-ah)

Balsam Roots. An American genus of Composite Family having Sunflower-like flowers. The roots are large, resinous

—sagittata. BALS-1. Pkt. 15c
Leaves like shields, blossoms like sunflowers, 1½-2-ft. tall, having tap root, April.

BALSAM. See Impatiens balsamina.

BAPTISIA (bap-TEZ-i-ah)

Sturdy perennial leguminous plants growing as high as 6-ft. Foliage deep green with indigo-blue, white or yellow flowers resembling Lupines in form; imposing in the border or wild garden, good for cutting, blooming late spring to mid-summer, followed by short plump pods that become black. Easily grown, best in partial shade, and best to start seed in open ground.

—australis. BAPT-1. Pkt. 15c
Deep blue flowers growing 3-4-ft. tall and the most popular, June and July, leaves 2½-in. long. Tallest species.

BALLOON VINE. See Cardiospermum hal.

BARTONIA. See Mentzelia lindleyi.

BAUHINIA (bau-HIN-i-ah)

Mountain-ebony. Tropical trees, shrubs and vines of Pea Family. In the South they make a fine showing with their colorful racemes of white, purple and yellow flowers.

—hookeri. BAUH-1. Pkt. 50c

BEANS (Ornamental)

—Scarlet Runner. BEAN-1. Pkt. 15c
¼ lb. 45c

BEAUMONTIA

(boh-MON-shi-ah)

Vigorous woody tropical vines, probably best grown as a greenhouse vine in the U.S. (We would be pleased to hear from anyone having grown it here).

—grandiflora. BEAU-1. Pkt. 40c
Herald's Trumpet. Grown in warm greenhouses and outdoors in the South. Inside, plant it in a bed, training the vine to the roof; large fragrant white flowers, trumpet-shaped, in terminal clusters; prune wood back well for next year's flowers.

BEGONIA

This is a very large and varied group of succulent, and partly shrubby, plants found in warm regions of the earth. There has been countless numbers of hybrids and varieties developed so that the dividing line between types has even become dimmed. We list here, especially, those increased by seed. There is plenty of interest in growing the various species and crossing them for new types and varieties. All begonias can be increased by seed, which, being very small, should be sown with the greatest care. They thrive in a mixture of fibrous loam, with leaf mold with some rotted cow manure and sand added. They can be divided into 3 groups, viz., fibrous rooted, tuberous rooted and rhizomatous.

—andersonii. BEG-1. Pkt. 25c
Leaves large, entire, flowers borne in an umbel at the apex of a tall spike.

—bhotan. BEG-2. Pkt. 25c
Leaves entire, very large, tuberous, flowers pink, scented.

—josephi. BEG-9. Pkt. 25c
Tuberous, flowers rose colored and small.

—lacinata. BEG-3. Pkt. 25c
Leaves palmate, epiphytic, flower small, rosy white, found in temperate regions.

—var. lutea. BEG-4. Pkt. 25c
A yellow flowering variety.

—picta. BEG-12. Pkt. 25c
Root stock tuberous, flowers pale rose, leaves variegated.

SEMPERFLORENS: This is a dwarf compact grower and almost an everbloomer, very popular as a summer bedding plant and for winter flowering under glass. It comes in many beautiful varieties. All HHP best grown as annuals.

—Crimson Bedder. BEG-19. Pkt. 50c
Small bright crimson flowers and a splendid bedding variety.

—Loveliness. BEG-20. Pkt. 50c
Clear rose-pink flowers in great profusion.

—Lucifer. BEG-21. Pkt. 50c
Very large flowers, often 2 inches across and in a bright salmon.

Semperflorens, Luminosa. BEG-14. Pkt. 25c

Fiery dark scarlet flowers, dark reddish brown foliage.

—Prima Donna. BEG-15. Pkt. 25c
Limpid rose shading to carmine at center, everblooming.

—Pink Bedder. BEG-22. Pkt. 50c
Erect habit of growth, bright pink flowers and very floriferous.

—Rose Pearl. BEG-23. Pkt. 50c
Bright rose flowers much like Gloire de Lourain; very good for pot culture.

—Blend. BEG-16X. Pkt. 25c
A blend of best named varieties in the B. semp. group. This is a high class blend.

—Saler's Begonia Blend. BEG-17X. Pkt. 25c
This is a hand made mixture of all kinds of Begonias, made especially for those wanting to grow all different types. If purchased separately would cost many dollars.

BELLIS (BEL-is)

(English Daisy). Herbaceous annuals or perennials. They need a fertile moist soil with plenty of sun. They can be grown from seed planted in the fall and wintered over in the cold frame or flowers will be produced from early sown seeds in the spring. They grow 6-8-in. tall and make good pot plants, for colonizing in the lawn like Crocus or for edging or low border. Do best in cool climate, blooming May-Aug. Planted with Pansies or For-Get-Me-Not's they make a pretty garden display.

—enorma. Mixed. BELL-1. Pkt. 25c
Large flowered.

—liliput. Rose. BELL-2. Pkt. 25c
Very small plants and flowers.

—moustrosa. Mixed. BELL-3X. Pkt. 25c
Single flowers, strong growers.

—Red Beauty. BELL-9. Pkt. 35c

—Rose Beauty. BELL-10. Pkt. 35c

—White Beauty. BELL-11. Pkt. 35c

—Double. Mixed. BELL-4X. Pkt. 35c

—perennis. Longfellow. BELL-5. Pkt. 25c; ¼ oz. \$1.25
An extra double, bright red strain.

—rosea delicata. BELL-6. Pkt. 25c; ¼ oz. \$1.25

—Snowball. BELL-7. Pkt. 25c; ¼ oz. \$1.25

BERBERIS

—koreana. BERB-2. Pkt. 60c
A deciduous species with very highly colored foliage in the autumn, 3 ft.

—thunbergii. BERB-3. Pkt. 25c
Hardy shrub that can be easily grown from seed and very commonly used for landscaping or for hedges, 4 ft.

—thunbergii atropurpurea. BERB-1. Pkt. 15c
(Red Leaf Barberry). The seedlings rarely show anything but the desired deep purple-red leaves; sow seeds very early.

BESSEYA (BES-se-ya)

Closely related to Synthyris and more interesting for their leaves than for the usually pale or even petalless flowers. Quite easily grown in a gritty soil rich in humus, preferably in light shade, suitable for the rock garden, but of botanical rather than horticultural interest.

—rubra. BESS-1. Pkt. 25c

Brownish heart-shaped leaves and short spikes of petalless flowers; the long anthers are bright red-purple and in such numbers that they make the plant quite attractive; known to westerners as 'Kittentails'. For the rock garden, in light shade, HP, 6 inches.

BETA (BEE-tah)

Common name, Beets. A very few sorts are ornamental, which are listed here; requires rich soil.

—dracaenaeifolia. BETA-1. Pkt. 25c

BIXA (BIK-sah)

—orellana. BIXA-1. Pkt. 30c
Annatto Tree. Grown in Florida for its dye, which is used in butter and cheese. It is easily grown from seed.

BOCCONIA (bok-OH-ni-ah) See Macleaya.

BOENNINGHAUSENIA

—albiflora. BOEN-1. Pkt. 40c

BOLTONIA

(False Chamomile). Tall perennials grown in the border or in groups in the wild garden.

—latisquama. BOLT-1. Pkt. 20c
Very good, bluish white to pink airy daisies blooming at least 2 months, 5-ft., HP.

BOMBAX

—malabaricum. BOMX-1. Pkt. 30c

BRACHYCOME (brak-i-KOH-me)

(Swan River Daisy). Herbaceous annuals and perennials with generally branching stems and solitary or loosely clustered heads of daisy-like flowers.

—iberidifolia, Mixed. BRAX-1. Pkt. 10c
¼ oz. 50c

Covered throughout the summer with star-shaped blooms in white and blue; 12-in. tall, graceful plants, fine for beds, border or rock garden, HA.

BRIZA (BRY-zah)

(Quaking Grass). Ornamental grasses grown mainly for bouquets, drying or for specimen plantings. They are easily grown from seed. There are several small annuals and perennials, and called Quaking Grass on account of the spikelets trembling in the light breeze. They are especially valued dried for use in bouquets. Sow seed early in spring in average good garden soil.

—gracilis. BRIZ-1. Pkt. 15c; ¼ oz. 25c

—maxima. BRIZ-3. Pkt. 15c; ¼ oz. 25c
Annual, 18-in. tall.

—Minna. BRIZ-2. Pkt. 15c; ¼ oz. 25c
Annual, slender and graceful, 6-in. tall.

Buddleia (BUD-lee-ah)

Butterfly Bush. Deciduous or half evergreen shrubs or trees belonging to the Logania Family, and only a few are hardy in the North; they grow rapidly and are free bloomers. They are easily grown from seed and there should be much interest in growing hybrids from them. Start them in frames for the first year.

—globosa. BUDD-1. Pkt. 30c
(Orange Ball). Handsome half-evergreen shrub from Chile standing a few degrees of frost striking in bloom with the long stalked round heads of orange yellow flowers, 15 ft.

—colvillei. BUDD-2. Pkt. 50c
A large tender shrub native of the Himalayas and said to be the most beautiful of all the Buddleias, having dense spikes of purple or crimson flowers with white eye, TP, to 20 ft.

—intermedia. BUDD-3. Pkt. 30c

BUPHTHALMUM

(beuf-THAL-mum)

(Or-Eye). Showy composite plants, perennials, 3-4-ft. tall, with large rather coarse leaves and yellow flowers. Easy culture, requiring a dry sunny position; they are useful for bold effects toward the back of the perennial border. Sow seed early in Spring when they usually flower the first year.

—salicifolia. BUPH-2. Pkt. 35c
A neat border plant with yellow flowers, a root runner and spreads rapidly, HP, 2 ft.

—speciosum. BUPH-3. Pkt. 45c
A showy Hungarian species with bold foliage and yellow flowers, HP, 5 ft.

CACALIA—see Emilia.

CACTUS

Succulent perennials, varying much in their form from tree-like growths to very small plants. Many are not considered hardy in the N. and when grown in the rock garden, plants grown in pots which are plunged into the soil, are used. They are the easiest plants for growing in a house and stand any amount of neglect.

Those native to the N. must be perfectly dry during the winter. While some are desert plants, many of the best come from the tropical regions, all of which are tender here. Good drainage is important in all types, water at the roots will ruin them in a single day. Planting on a sloping bed is almost necessary and the soil should be on the sandy order, not a heavy soil. For planting sow a few seeds in a pot with plenty of drainage. Most sorts germinating in 20 days but others may require as much as 4 months. Grow your plants on in pots, both for indoor and outdoor use. Do not allow to freeze and in the fall bring them inside and store in a cool basement where there is a little sunlight. No care is needed during this resting period which should be at least 2-3 months. Another caution, do not water overhead and always in limited amounts and not often.

—cactus, Mixed. CACT-1. Pkt. 20c
A mixture S. Am. cactus seed, plants being very much like cereus peruvianus. One of the fastest growing types, flowers white, very large and appear only at night, fruit bright red and is like a delicious apple; grows tall with arms very much like the Arizona Giant Cactus.

—echinocereus enneacanthus. CACT-2. Pkt. 15c
(Twisted Rib Cactus, Strawberry Cactus). The delicious fruit taste very much like strawberries, native of S. Texas and N. Mexico, grows in clumps having as many as 100 heads at times; 4-in. in height in 2 years, flowers are rich reddish purple about 2-in. across opening noon to 5 o'clock, April-June.

—ferocactus miltizenii. CACT-3. Pkt. 15c
(Barrel Cactus). Very beautiful scenic desert plant, stems globular to cylindrical often very large to 6-ft. or more; flowers in clusters at top of plant, yellow in color, plant dark green, growth 3-in. diameter in 3 years.

CALAMINTHA

—grandiflora. CALM-1. Pkt. 30c
A fine border plant with bright rose-purple flowers, doing well in ordinary soil, HP, 9 inches.

CALANDRINA

(kal-an-DRIN-i-ah)

Low growing spreading fleshy plants of the Portulaca Family, occasionally grown as annuals in the rock garden or edging in borders. Require a sunny location. Flowers orange-yellow and coppery rose to brick red or crimson magenta.

—amaranth. COLD-1. Pkt. 20c
Crimson-magenta, hardy annual.

CALANTHE (kah-LAN-thee)

Mostly tropical terrestrial orchids which are very popular; they are easily grown by following a few cultural requirements. They have beautiful long racemes of white, rose or pink flowers. They are well worth growing. See Orchids.

—brevisonum. CLAN-1. Pkt. \$1.00

CALCEOLARIA

(kal-se-oh-lay-ri-ah)

Chiefly greenhouse plants of the Figwort Family, bearing red and yellow spotted flowers each with a large inflated pouch. They make very pretty pot plants and are popular. They require a low temperature, not over 60 degrees and a north exposure for the germination of the seeds; March to July is the usual seed time, using a mixture of 2/5 sand; 2/5 loose peat and 1/5 charcoal all sifted, cover this with a little sifted sphagnum after the seeds have been placed on top of the soil and carefully pressed down. Water from below and do not expose the seedlings to the direct sun till autumn; give plenty of air.

—Albert Kent Hybrids. CALC-1. Pkt. 75c
Varied colors, from May onwards, a fine strain.

—hybrida rugosa. CALC-2. Pkt. 75c
Shrubby varieties in beautiful mixture, GP*, 1½ ft.

Large Chrysanth. type but more double.

—Mixed Florist Calendulas. CALN-11X. Pkt. 10c; ½ oz. 50c

Special varieties and strains for greenhouse growing.

—Mixed Art Shades. CALN-12X. Pkt. 10c; ½ oz. 50c

Fastest shades in many varieties.

Mixed Calendulas. CALN-13X. Pkt. 10c; ½ oz. 40c

CALIFORNIA POPPY. See Eschscholtzia.

CALENDULA (kah-LEN-due-lah)

They are definitely cool weather loving plants and in the warmer climates should be sown in the fall for early bloom in the late winter and early spring. While they like full sun they cannot stand the burning sun of summer. In colder climates, seed should be started in the cold frame and plants set out as soon as possible for late spring and early summer bloom. In planting Calendulas be sure you choose the proper type for your needs. The outdoor growing sorts are sturdier, more compact growth and much better for garden use, while the forcing varieties for greenhouse use are best for indoor growing.

—chrysanth. CALN-1. Pkt. 10c; (Sunshine). Large clear buttercup yellow.

—Campfire. CALN-2. Pkt. 10c; ½ oz. 30c

—macrocarpus. CALO-1. Pkt. 25c
Large lavender flowers, 10-18 inches tall, June-July, a native of northern Montana.

CALTHA (KAL-thah)

Small succulent perennials chiefly of N. Am., of Crowfoot Family. Thrive in marsh land near running water but can be grown in moist sections of the flower border. They are especially nice near water gardens, blooming in the spring and often again in the fall. Flowers are without petals, but the sepals of yellow, pink or white are very showy. They make long lasting cut flowers.

—acaposia. CALT-2. Pkt. 50c
Dwarf, with broad-rayed flowers borne singly on short stems; this come from the Himalayan mountains and is particularly desirable.

—rotundifolia. CALT-1. Pkt. 25c
Glossy arrow-shaped leaves and rather large white flowers with a heart of golden anthers; beautiful for wet places in sun or light shade; 1 ft.

CAMASSIA (kah-MAS-ah)

No. Amer. bulbous plants of Lily Family having blue or white flowers in graceful racemes and narrow grass-like foliage. Perfectly hardy, plant in groups of 10 or more, 3-4-in. apart, in border. The small species are good rock garden subjects.

—quashash. CAMA-1. Pkt. 15c
The common Camass, blue flowers, 18-in. tall, very good, May-June.

—esculenta. CAMA-2. Pkt. 30c
Erect spikes of pale blue; excellent for cutting, HbB, 2 ft.

CAMPANULA (kam-PAN-eu-lah)

(Canterbury Bells, Bell Flower, Harebell and Bluebell). Biennial and perennials with a few annuals. There are a great many species, of which we carry an exceptionally large number. The annuals are started from early planted seed and the biennials usually indoors early in March when they usually flower the first year, getting them well rooted in their permanent position before frosts. They should be mulched with leaves where the winters are severe.

—annual. Mixed. CAMP-1. Pkt. 15c
A strain that will flower first year if sown early; blooms in 5-6 months, showy in the border and a good cut flower, 2-2½ ft. tall.

C. MEDIUM: (Common Canterbury Bells)
This species is the well known Canterbury Bell, in all its forms. They are biennials. Flowers June-July, 3-ft.

—Single. Mixed. CAMP-11X. Pkt. 10c; ¼ oz. 30c

—Lavender. CAMP-34. Pkt. 25c
Single lavender flowers of good form.

—fl. pl. Blue. CAMP-3. Pkt. 10c; ¼ oz. 35c

Double blue flowers.

—fl. pl. Rose. CAMP-9. Pkt. 10c; ¼ oz. 35c

Double rose flowers.

—fl. pl. Double. Mixed. CAMP-10X. Pkt. 10c; ½ oz. 40c

—Calycanthemum. Mixed. CAMP-12x. Pkt. 15c

Cup-and-Saucer type.

—Violet-blue. CAMP-35. Pkt. 25c

—Lavender. CAMP-36. Pkt. 25c

—Choicest Mixed. CAMP-12T. Pkt. 25c

A select English grown strain of Cup-and-Saucer Canterbury Bells.

—fl. pl. Mixed. CAMP-10T. Pkt. 20c

An English grown strain of double Canterbury Bells.

—alliaracifolia. CAMP-17. Pkt. 25c

A very desirable border plant with creamy-white flowers, HP, 2½ ft.

—Auchori. CAMP-18. Pkt. \$1.00

A rare species from the Caucasus, HP.

—barbata. CAMP-19. Pkt. 40c

A distinct and pretty species with pale porcelain blue flowers, HP, 1 ft.

—bononiensis. CAMP-20. Pkt. 25c

A tall branching type with pretty blue flowers in loose spikes, HP, 3 ft.

—carpatia. Blue. CAMP-3. Pkt. 15c

(Carpathian Harebell). HP, blooming all summer; for edge of border or rock garden, partial shade, 10 inches.

—white. CAMP-4. Pkt. 15c

Same as above, except color is white.

—Dwarf Hybrids. CAMP-21. Pkt. 40c

New dwarf varieties and excellent for rock gardens; this is an English grown strain, HP, 6 inches.

—Isabel. CAMP-22. Pkt. 35c

A distinct and good variety with large flat blue flowers, HP, 9 inches.

—Riverslea. CAMP-23. Pkt. 50c

A very handsome form with large flat-tish clear blue flowers; fine, HP, 1 ft.

—White Star. CAMP-24. Pkt. 35c

A charming compact English white flowered form, HP, 1 ft.

—celtidifolia. CAMP-25. Pkt. 35c

A fine border species, tallish habit and with pale blue flowers, HP, 2½ ft.

—lactiflora. CAMP-26. Pkt. 35c

Handsome strong growing species, white to pale blue, HP, 2 ft.

—fragilis. CAMP-6. Pkt. 15c

A rare type, celestial blue, fine for the rock garden or in pots, HP.

—garganica. CAMP-7. Pkt. 15c

Elegant dwarf trailer, flowers blue, HP.

—hirsuta. CAMP-28. Pkt. 50c

Pale blue flowers, hairy foliage, dwarf trailer, HP.

—glomerata superba. CAMP-29. Pkt. 35c

A grand border plant having large heads of royal purple flowers, HP, 1½ ft.

—hybrida Abundance. CAMP-30. Pkt. 40c

Very free flowering hybrid with lilac-blue flowers, HP, 6 inches.

—Norman Grove. CAMP-31. Pkt. 60c

A real alpine gem, free flowering and rich blue flowers, HP, 4 inches.

—imperialis. Mixed. CAMP-37. Pkt. 25c

A pyramidal growth with upright flowers with colors rich and varied; this should be tried, HB, 2½ ft.

—latifolia. CAMP-32. Pkt. 30c
Very large blue flowers in abundance, indigenous to England, HP, 2 ft.

—alba. CAMP-33. Pkt. 30c
A pure white variety of this fine border plant, HP, 2 ft.

—persicifolia. CAMP-38. Pkt. 25c
(Peach-leaved Bellflower). The most beautiful of the perennial sorts, violet-blue flowers in June-July in profusion; separate plants in early fall or spring for a vigorous growth, HP, 2 ft.

—alba. CAMP-27. Pkt. 30c
A beautiful white form of this species, 2 ft.

—New Giant Hybrids. CAMP-39. Pkt. 40c

Marvelous new giant varieties grown for us from a fine English collection, HP, 4 ft.

—gr. fl. Telham Beauty. CAMP-40. Pkt. 40c

This has very large bells of a beautiful china-blue, HP, 2 ft.

—Poscharkyana. CAMP-41. Pkt. 30c

Spreading habit with sprays of lovely pale blue flowers, HP, 4 inches.

—psuedo. Raineri. CAMP-42. Pkt. 35c

This is a charming little plant with large open purple-blue flowers, HP, 6 inches.

—rapunculoides. CAMP-14. Pkt. 20c

Perennial; a row makes a strikingly beautiful hedge, flowers soft blue to deep violet; the bell-shaped flowers hang loosely from the stems giving the plant a pleasing appearance, 3-ft.

—rotundifolia, Olympica. CAMP-15. Pkt. 25c

(Blue Bells of Scotland). HP. The true Harebell bearing a mass of large light blue flowers, June-Aug., very showy, 1-ft. Extra fine variety of this species for the rock garden.

—speculum gr. fl. CAMP-16. Pkt. 10c

Erect cup-like flowers of violet-blue; a neat dwarf habit, HP, 6 inches.

—tubinata. CAMP-45. Pkt. 40c

Erect cup-like flowers of violet-blue; a neat dwarf habit, HP, 6 inches.

—palida. CAMP-46. Pkt. 40c

Pale blue form with large and conspicuous flowers, HP, 3 inches.

—sarmatica. CAMP-44. Pkt. 50c

Very distinct dwarf species with pale blue flowers, HP, 1 ft.

—Rock Garden Species, Mixed. CAMP-47. Pkt. 50c

An English grown strain of species useful for rock gardens and walls, HP, 9 inches.

CANDYTUFF.....See Iberis.

CANNA (KA-nah)

Tropical summer flowering plants of the Banana Family growing from thick fleshy tuber-like roots. Valued for both their tropical appearing foliage and their brilliantly colored flowers. Range from 2½-10-ft. tall, in the N. they must be handled as tender annuals. Grown from seed, which should be started early indoors in Feb. or March. File a small notch in the hard shell of the seed and then soak it in warm water over night. Interesting new kinds can be raised from seed.

C. FLACCIDA:

—Vilmoria Hybrids. CANA-3. Pkt. 15c

The best of the French strains.

CARDIOSPERMUM (kahr-di-oh-SPUR-mum)

(Balloon Vine, Heart Seed). Hardy annuals and perennial vines excellent for covering wire fences or trellises, growing to 10-ft. The seed pods are inflated like balloons. Quick growing, graceful, deeply cut leaves and small white 4-petaled flowers. Sow seed where plants are to grow or they can be started indoors. Light soil and sheltered spot.

—halicacabum. CARD-1. Pkt. 10c; oz. 40c

(Love-in-a-Puff or True Balloon Vine). Soak seeds, sometimes they require as much as 40 days to germinate.

CARDUUS (KAHR-deu-us)

(Plumeless Thistle, Silphium). Vigorous robust, spiny-leaved annual and perennial plants with purple tubular flowers, very striking in both flower and foliage, some being very ornamental, grow well in ordinary soil.

—marianus. CDUS-1. Pkt. 15c

Hardy annual, white flower, 4-ft. tall.

CARNATION.....See Dianthus.

CARTHAMUS (KAHR-tha-mus)

(Bastard Saffron, Safflower). Spiny leaved annuals, flower heads purplish or yellow making ornamental clumps in the garden.

—tinctorius. CATH-1. Pkt. 15c

(False-saffron). Produces two dyes much used in commerce, HA, sow seeds in April where plants are to bloom.

CASSIA (KASH-ah)

(Senna). All are sun lovers, doing best in a sandy loam soil, very attractive with finely cut foliage and showy flowers.

—fasciculata. CASS-1. Pkt. 15c

An easily grown shown annual; plants graceful feuntains of pinnate foliage set with golden yellow flowers flaked crimson at base of petals, 20-in.

—marilandica. CASS-2. Pkt. 15c

One of the better hardy perennials of late summer, massive racemes of showy yellow flowers, thriving in either moist or dry soils, 5-ft.

—laevigata. CASS-3. Pkt. 20c

CATANANCHE (kat-ah-NAN-kee)

—caerulea alba. CATA-1. Pkt. 35c

HP from S. Europe known as Cupid's Darts, bearing blue daisy-like flowers from June-Aug., grown both for the border and for everlasting, 2 ft.

CATHCARTH

—villosa. CART-1. Pkt. 50c

CELOSIA (se-LOH-shi-ah)

(Cockscomb, Chinese Woolflower). Popular annuals, all easily grown from seed and for early plants seed can be started indoors. Do best in a fertile soil and the different types have varied uses, from pot plants to all types of bedding. The Cockscombs are the Species, argentea. All the types listed as cristata, plumosa, childsi are forms of C. argentea. Start seed in

doors in March to produce plants to set outdoors late in May.

CHILDSI or CHINESE WOOLFLOWER:

—Mixed. CLOS-1. Pkt. 10c
Plants much branched, each tipped with a round woolly flower, dandy for garden display and cutting, lasting well, 2-ft.

CRISTATA or COCKSCOMB:

—Dwarf Empress. CLOS-2. Pkt. 15c
Dark velvety crimson-maroon heads of enormous size, foliage red; a carefully re-selected strain for bedding, plants dwarf, 1-ft. The heads hold their color during winter when used as an everlasting flower.

—Pres. Thiers. CLOS-3. Pkt. 15c
(Glasgow Prize). Similar to Dwarf Empress with velvety-crimson combs and green foliage, 10-in. An excellent dwarf strain.

—Tall Mixed. CLOS-4. Pkt. 10c

Plants tall, 1½-ft., for bedding.

—Tall Crimson. CLOS-5. Pkt. 10c

Bright crimson, uniform 18-in. plants.

—Tall Royal Velvet. CLOS-6. Pkt. 15c

Rich carmine-crimson, foliage bronze-green with reddish margins.

—Finest Mixed. CLOS-7X. Pkt. 10c

Dwarf varieties, best.

GILBERT'S HYBRID COCKSCOMB.

—Maple Leaf. CLOS-8. Pkt. 25c

Lovely ball-shaped flower heads of pink tipped with gold, leaves bright green, 3-ft. Suitable for semi-tall border, very useful for cut flowers, dries well for winter bouquets.

—Green Gold. CLOS-9. Pkt. 25c

An unusual color combination of pastel shades, ball-shaped flower heads, at first a silvery green that, as flower heads develop, becomes flushed with light rose and gold, 30-in. tall, leaves bright green. Very useful as a cut flower and in the semi-low border. This is the only Celosia to date that will take a good color dye after it has been dried for winter bouquets.

—Rose Beauty. CLOS-10. Pkt. 25c

PLUMOSA or FEATHERED CELOSIA:

Tall feathery spikes in various colors.

—Tall Fire Plume. CLOS-11. Pkt. 20c

Red foliage, each branch ending in a great fire-scarlet plume, excellent for center of large beds, 3-ft.

—Gold Feather. CLOS-12. Pkt. 20c

Bright golden yellow plumes, 3-ft.

—Mixed. CLOS-13X. Pkt. 15c

Blend of the C. plum magnifica type, 3-ft.

—Pride of Castle Gould. CLOS-14. Pkt. 15c

Select strain, large fluffy plumes in scarlet crimson, 3-ft.

—Fiery Feather. CLOS-15. Pkt. 25c

Dwarf Florist Strain, bright scarlet plumes, for bedding or pot culture, uniform type, 1-ft. tall.

—Thompson, Red. CLOS-16. Pkt. 10c

30-in. tall, bright red plumes.

—Yellow. CLOS-17. Pkt. 10c

30-in. tall, golden yellow plumes.

CELMISA

—ceriacea Monroii. CELM-1. Pkt. 75c

A striking New Zealand plant with silvery foliage and large pure white daisy-like flowers, HP, 1½ ft.

CENTAUREA (sen-tau-REE-ah)

Herbaceous annuals and perennials, both single and double flowers and sometimes plume or pom-pom-like. There are many species, all of value in the garden, all hardy and thrive in ordinary garden soil if given a sunny location. Blooming from July to frost, free flowering and make fine cut flowers. Annuals are hardy and best grown from seed sown in open ground in April, or they can be started earlier indoors. The foliage types can be increased from seeds planted in Aug. The perennials can be started in usual manner for perennials.

—americana, Lilac. CENT-1. Pkt. 10c

(Basket Flower). Bearing solitary thistle-like flowers, often 5-in. across, 3-ft. tall, hardy annual, July-Sept.

—White. CENT-2. Pkt. 10c

—argentea vera candidissima. CENT-3. Pkt. 25c

Hardy perennial, 1½-ft. tall, yellow flowers and silvery leaves.

—cyanus, Jubilee Gem. CENT-4. Pkt. 10c

This is a dwarf, bushy, compact plant only 1-ft. high with dark blue double flowers and especially suited for edging, borders, rockery or pot plants. Very free flowering, hardy annual.

—Polar Gem. CENT-11. Pkt. 25c

A new white variety of same habit as Jubilee Gem.

SPECIAL STRAIN BABCHELOR BUTTONS.

The flowers of this strain are large, fully double and the colors intensified. Long stems for cutting make this strain fine for florist use as well as for the garden.

—Black Boy. CENT-5. Pkt. 10c

Blackish maroon colored flowers.

—Blue Boy. CENT-6. Pkt. 10c

—Pinkie. CENT-7. Pkt. 10c

Deep pink.

—Red Boy. CENT-8. Pkt. 10c

—Snow-Man. CENT-9. Pkt. 10c

—Formula Blend. CENT-10X. Pkt. 10c

NOTE: Each of above, oz. 60c; ¼ lb. \$2.00. Carefully hand made blend of above.

—dealbata, Rose Delight. CENT-12.

Large and attractive flowers in mauve-rose pinnate foliage, very pretty, HP, 2½-ft.

—depressa. CENT-13. Pkt. 10c

Pkt. 15c

(cyanoides). syn. (Queen of the Cornflowers, dark blue, HA, 1-ft.

—gymnocarpa. CENT-14. Pkt. 10c

(Dusty Miller). Finely cut silver-gray foliage; lavender flowers, used for foliage effect. Start indoors, tender annual, 1½-ft.

—macrocephala. CENT-16. Pkt. 10c

Enormous, very double, golden flowers on 3-4-ft. plants, July-Aug., very showy, HP.

—montana. CENT-17. Pkt. 10c

Lovely bright blue lace flowers that bloom late in spring resembling annual cornflowers, but larger, HP.

SWEET SULTAN:

—moschata, Mixed. CENT-18. Pkt. 10c

(Sweet Sultan). Fragrant, white, yellow or purple solitary flowers, 2-in. across, often beautifully soft and fluffy, HA.

—The Bride. CENT-22. Pkt. 25c

Large pure white flowers; a real charming variety, HA, 2 ft.

—suaveolens. CENT-19. Pkt. 10c

(Yellow Sweet Sultan). HA, 2½-ft. tall, yellow flowers.

—imperialis, Mixed. CENT-15X. Pkt. 15c

(Giant Sweet Sultan). Hybrid between C. moschata and its variety alba, fragrant flowers life soft thistles, in white, rose, lilac and blue. They add beauty to the garden and are excellent cut flowers, 2½-3-ft., HA.

—Hardy Perennial Blend. CENT-20X. Pkt. 10c

This blend contains only perennial species.

—Centaurea Blend. CENT-21X. Pkt. 10c

This blend contains about an equal mixture of every species and variety.

CENTRANTHUS (sen-TRAN-thus)

(Or Kentranthus). Annual and perennial plants of Valerian Family, very popular in garden, flowers small, white or red, and borne in dense terminal clusters. Easily grown in border.

—macrocephalon. Mixed. CRAN-1. Pkt. 10c

HA, pretty in masses, pink, red and white flowers, very desirable, 1-ft.

—ruber. CRAN-2. Pkt. 25c

(Red Valerian or Pretty Betsy). Sweet scented, red flowers and blooms all summer, HP, 1½ ft.

—atrococcineus. CRAN-3. Pkt. 25c

A dark red variety and very useful for contrast, HP, 1½ ft.

CEPHALARIA (se-fah-LAY-ri-ah)

Annual and perennial plants blooming from June to Aug., with flowers similar to those of Scabiosa, useful both in the border and for cut flowers; colors range from creamy-white to various yellow tints and does well in ordinary garden soil.

(kris-AN-the-mum)

This is a rather large genus of annual and perennial plants, with flowers in all colors excepting blue and true purple. China, Japan and India have furnished us with most of them but hybridizing has been carried on to such an extent that we have innumerable hybrids. Classified under chrysanthemums where they belong are (1) the garden annuals, (2) the perennial border sorts, (3) feverfew, (4) pyrethrum, (5) marguerites and (6) the florist's chrysanthemum.

GARDEN ANNUALS:

Bloom in late summer, easily grown, robust and seed sown in open ground as early as soil can be worked. They are

CHRYSOPODIS (iris-OP-sis)

(Golden Aster). Daisy-like plants with yellow flowers on 1-3-ft. plants, at home in the dry sunny part of wild garden. Hardy perennials.

- calicata.** CHRY-3. Pkt. 50c
This is recommended highly as a rock garden perennial, with silky gray foliage and pretty yellow flowers, HP, 1 1/2 ft.
- mariana.** CHSO-2. Pkt. 25c
Large Aster-like flowers in a pretty rich yellow, blooming Aug.-Nov., HP, 1 1/2 ft.
- villosa.** CHSO-1. Pkt. 25c
Golden Aster. Yellow flowers, 1-ft. tall, May-June.

CINERARIA (sin-e-RAY-ri-ah)

(Bot. Senecio Cruentus). They are strictly greenhouse plants, altho perennials, and are grown mainly as winter flowering pot plants, new stock is grown each year. Seed is best sown April-June but also till Sept. for later flowers; soil, sandy loam, containing 1/3 leaf mold. Pot up seedling as soon as large enough and keep moist and cool. Liquid manure is beneficial AFTER buds appear. Other species will be listed under Senecio, which see.

- Hybrid gr. fl. Multiflora nana. Mixed.** CIN-1. Pkt. 50c
Dwarf compact plants producing masses of small flowers in a showy color range in self colors. Claimed to be the best pot plant.
- Multiflora Maxima, Berlin Market.** CIN-2. Pkt. 50c
Larger flowers and plants somewhat higher than C. multiflora nana but as rich flowering and showing the same good display of colors, 15-in. tall.
- multiflora nana.** CIN-7. Pkt. \$1.00
A very fine English grown strain in self colors, GP*, 1 ft.
- stellata.** CIN-6. Pkt. \$1.00
Star Cineraria. Very pretty small star-shaped flowers in immense heads, colors much varied and very nice for cutting, GP*, 3 ft.
- squandiflora.** CIN-5. Pkt. \$1.00
A splendid English grown strain with very large flowers and fine form, in beautiful colors, dwarf habit and compact plant; first quality in every way and unsurpassed, GP*, 1 ft.
- Siter's Rainbow Mixed.** CIN-3. Pkt. 50c
Hybrid gr. fl. large flower heads on compact plants in a lovely color range.
- maritime, Diamond.** CIN-4. Pkt. 25c

NOTE: Greenhouse growers.
The Cinerarias marked GP* are all of the very highest quality for greenhouse growing and cannot be excelled; and as soon as seed can be gotten through from Germany we also expect to have some of the finest strains grown there.

- Scandens, Violet-blue.** COBA-1. Pkt. 15c; oz. 95c

COBAEA SCANDENS
(koh-BEE-ah)
Climbing vine, 25-ft., growing rapidly from seeds, best results by setting the seeds on edge when planting; in North best to start indoors to set out after danger of frost is passed; violet-blue. It is commonly known in the greenhouse.

- Scandens, Violet-blue.** COBA-1. Pkt. 15c; oz. 95c

CODONOPSIS

(koh-doh-NOP-sis)
Plants of the Bellflower Family grown in the border, some being vines. Require winter protection in the North.

- clematidea.** COD-1. Pkt. 30c
Charming blue bell-shaped flowers with white and yellow centers, HP, 1 ft.

COELOGYNE (see-LOJ-i-nee)

Tropical epiphytic orchids with long racemes of white or greenish-yellow flowers; native of the tropics, grown under glass in the U.S. in moderately warm atmosphere, doing best in hanging baskets; soil mixture of osmundine and sphagnum.

- barbata.** COEL-1. Pkt. \$1.00

COFFEA (kaw-FE-ah)

Coffee. Can be grown in the South and in greenhouses. Their foliage is shining and the flowers fragrant and white; followed by attractive red berries. Use half peat and half loam for the soil.

- arabica.** COFF-1. Pkt. 50c

COIX (KOH-iks)

A genus of tall broad leaved grasses.

- lachryma-jobi.** COIX-1. Pkt. 15c

(Job's Tears). Altho a perennial it is generally grown as an annual, not standing northern winters. Plant seed in early to mid-May in open ground. They grow 4-ft. tall; the seeds hang in clusters. If cut before seed is too ripe the grass makes fine dried ornamental grass; the seeds also can be used as beads.

COLEUS (KOH-lee-us)

Tender annuals, grown only for their beautiful foliage effect, growing them from seeds is fascinating as the seedlings vary greatly in foliage design. Used for bedding and edging as well as pot plants. Sow seeds in flats indoors and transplant out when weather becomes warm; for best color grow in sun.

- Avalon Strain.** COLE-1. Pkt. 20c

The coloring more varied and brilliant markings of salmon, apricot, bright pink, rose, cream, carmine, bronze, purple and copper.

- Glory of Vichy.** COLE-2. Pkt. 20c

Large leaved with lovely color blend in apricot and copper shades.

- Brocade Strain.** COLE-5. Pkt. 25c

Leaves particularly large, colors rich and dark like old brocade; velvet effect.

- Pyrenean Giant.** COLE-3. Pkt. 20c

Large robust plants, excellent for bedding, in lovely colors.

- Striped Empel.** COLE-4. Pkt. 20c

Vigorous grower, leaves striped with green, white, yellow and brown.

- Rainbow Mixture.** COLE-6X. Pkt. 20c; 1/16 oz. \$1.00

Hand made blend of the best kinds, including seeds saved from one of the best European collections; also contains all above offers.

- Prize Strain Mixed.** COLE-7. Pkt. 50c

An English grown strain, large leaves in dark apricot, rose and copper shades, HHP*, 3 ft.

COLLINSIA (ko-LIN-si-ah)

Hardy attractive free blooming annuals used in rock gardens and edgings; they are pretty, low growing plants in whorls of 5-6 blossoms and 3 or more whorls on every stem. Sow seeds outdoors in the fall and protect or sow early in the spring. Prefer a dry location.

- bicolor, Mixed.** COLL-1. Pkt. 15c

In rose, white, lilac, violet and blue, June-Oct., 15-in. tall.

- verna.** COLL-2. Pkt. 50c

(Blue-eye Mary). A sort of rarely now-a-

CLEMATIS (KLEM-ah-tis)

Herbaceous perennial or woody climbing plants of the Buttercup Family, found all over the temperate zone. They are

rich loamy soil on alkaline side—add lime—and they respond to an annual dressing of rotted manure. There are many kinds and all are of ornamental value, the vines being especially good on fences, arbors, porches, etc. Prune those that flower on last year's wood, after they flower and those that flower from young basal shoots should be cut back to the ground each spring.

- columbianum.** CLEM-2. Pkt. 25c

Try this trailing purple Clematis with vine Honeysuckle (Lonicera Ciliosa) on a shaded wall 10-ft. June.

- douglasii.** CLEM-1. Pkt. 25c

Urn-flowered Clematis. Blue flowers, 1-2 ft. tall.

- montana.** CLEM-4. Pkt. 25c

A vigorous grower, having fragrant white anemone-like flowers in May and June; easily grown from seed.

- tricolor.** CONV-4. Pkt. 20c

Minor Convolvulus. Deep blue, yellow and white flowers, HA, 1 1/2 ft. A bush growing form.

- tricolor, Crimson Rambler.** CONV-1. Pkt. 10c

Bright ruby-red, rapid climber, has been sold much as Scarlet O'Hara.

- Dwarf, Royal Ensign.** CONV-3. Pkt. 10c

The deepest blue and brightest of all annuals, while halo and gold throat; for edging and borders they are ideal, flowering continuously all summer long, 1-ft.

- Major Mixed.** CONV-2. Pkt. 10c

Climbing, mixed colors.

CORDIA (KAUR-di-ah)

Tropical trees and shrubs, for greenhouse or outdoors in the far S., thriving in light rich soil, easily grown from seed.

- boissieri.** CORD-1. Pkt. 25c

CORAL FLOWER—see Tallinum.**COREOPSIS (koh-ree-OP-sis)**

lanceolata gr. fl.

These are the perennial species, the annuals are listed as Calliposis, which see. They are easily grown, either by starting early in the spring or by planting as late as Aug. for plants for the coming season. Does best in a sunny location and in the border they make a brilliant showing; the dwarf compact varieties being good for edgings.

- New Gold.** CORE-1. Pkt. 10c

100% double strain. Flowers are large and fluffy, of rich golden yellow with long stems, making them ideal for cutting, 2 1/2 ft.

- Double Sunburst.** CORE-2. Pkt. 10c

Flowers 1 1/2-2-in. across, beautiful golden yellow, long lasting, comes about 80% double, excellent for cutting.

- Mayfield Giant.** CORE-3. Pkt. 10c

Large golden yellow on a very vigorous plant, longer and stouter stems and ray petals broader.

- pubescens superba.** CORE-4. Pkt. 20c

A very free growing species with large yellow flowers with a dark blotch in the center, HP, 3 ft.

- Mixed.** CORE-4X. Pkt. 10c; 1/2 oz. 30c

CORN—ORNAMENTAL

- Bassett's Indian Corn.** CORN-1. Pkt. 20c; 1/2 lb. 50c

This strain is the brightest and contains the largest number of colors and combinations of any strain we have ever seen. The ears are of the flint corn type, long, 10-12 rows; the kernels large flint type with all the colors of the rainbow, often as many as 10 different colors on a single ear. Colors: bright yellow, white, cream, all shades of red imaginable, blues, strawberry, even green, and these colors also in combination on one kernel. This corn is highly ornamental and used as decorations in many ways, the kernels also supplying a wide variety of colors for design work on ornamental dishes, plates, etc. Harvest the ears promptly when ripe, pulling husks back neatly and hanging them up to dry in a clean, shady, dustless place.

- Strawberry Pop Corn.** CORN-2. Pkt. 15c; oz. 25c

A small red ear, pop corn, just about the shape of a large strawberry and in a rich deep wine red color. It is very ornamental and can also be used for pop corn. Our strain will definitely come true from seed. The husks can be folded back when picked and the corn dried thus.

CORTADERIA

(kor-ta-DEE-ri-ah)

Ornamental grasses, sometimes classed as Gynerium, the two genera being much alike except for the flower details. They thrive in rich light sandy soils. They are not hardy in the far North, and it is best to start them indoors and transplant out after frost danger is passed. Called Pampas Grass.

- argenteum.** CORT-1. Pkt. 15c

(Pampas Grass). Showiest of ornamental grasses with long silky plumes in late summer, lasting for weeks; can be cut and dried for winter use as soon as they are fully developed.

- roseum.** CORT-2. Pkt. 15c

Same but with pretty rose tinted plumes.

COSMOS (KOS-mos)

Tall half hardy annuals, very easily grown from seeds sown late in April or they can be started indoors. They thrive even in poor soil and require a sunny location; thin plants to 2-ft. apart and when a height of 2-in. is reached in the seedlings pinch off the tops so as to induce side branching.

- Sensation Radiance.** COS-1. Pkt. 20c; 1/2 oz. \$1.25

Top award winner for 1948, a striking new color combination never before seen in Cosmos. Deep rose petals overlaid with a large well defined zone of rich crimson. This should be in every flower garden this year.

- Sensation Dazzler.** COS-14. Pkt. 15c

A pretty crimson variety, 40 inches tall.

- Sensation, Mixed.** COS-2X. Pkt. 10c

Contains all the Sensation type varieties, rose pink, crimson, white and Radiance.

TRUE EARLY FLOWERING SINGLE**MAMMOTH STRAIN:**

(Superior Garden Strain)

- Crimson Queen.** COS-5. Pkt. 15c

- Rose Queen.** COS-4. Pkt. 15c; 1/2 oz. 45c

CONVOLVULUS

(kon-VOL-veu-lus)

Those offered here are half hardy annuals and resemble the true Morning Glories (Ipomoea) except that their flowers remain open all day; full sunshine and not too much water their only requirements. The dwarf species can be used for bedding, the tall are good for covering trellises and walls.

- tricolor.** CONV-4. Pkt. 20c

Minor Convolvulus. Deep blue, yellow and white flowers, HA, 1 1/2 ft. A bush growing form.

- tricolor, Crimson Rambler.** CONV-1. Pkt. 10c

Bright ruby-red, rapid climber, has been sold much as Scarlet O'Hara.

- Dwarf, Royal Ensign.** CONV-3. Pkt. 10c

The deepest blue and brightest of all annuals, while halo and gold throat; for edging and borders they are ideal, flowering continuously all summer long, 1-ft.

- Major Mixed.** CONV-2. Pkt. 10c

Climbing, mixed colors.

COTONEASTER

(koh-toh-ne-AS-ter)

Deciduous or evergreen shrubs of temperate zone, mostly from China, belonging to Rose Family. They are very ornamental and while a little tender in the N. they stand the winters well in the central states without protection. They can be grown in pots at the start until ready to be set out in their permanent locations. Sunny locations and well drained soil.

- acuminata.** COTN-1. Pkt. 25c

Dwarf, evergreen type, spreading habit with white flowers.

- microphylla.** COTN-2. Pkt. 25c

Dwarf, evergreen type, spreading habit with white flowers.

- retundifolia.** COTN-3. Pkt. 25c

One of the most beautiful in flower and fruit; grows to 20 ft., not hardy in North.

- frigida.** COTN-4. Pkt. 25c

One of the most beautiful in flower and fruit; grows to 20 ft., not hardy in North.

CROCUS (CRO-cus)

While Crocus are generally grown from corms, they can also be grown, with much interest, from seed; and especially many of the rarer specimens. There is also the pleasure of hybridizing. Plant the seeds in flats or pots where they can be started under the best conditions and grown on for a time in the cold frame and then later the small corms can be planted to their permanent beds.

- Species Mixed.** CROC-1. Pkt. 30c

An English grown strain containing many different species.

- Tommasianus.** CROC-2. Pkt. 30c

A beautiful pale bluish-lavender.

CROTALARIA

(kroh-tah-LAY-ri-ah)

(Rattlebox). Herbs and shrubs having Sweet Pea-like flowers and swollen pods. Best grown from seeds which must be soaked in warm water.

- refusa.** CROT-2. Pkt. 20c

(Golden Sweet Pea). Showy annual bush plant with many upright, spire-like spikes of glossy golden yellow pea-like flowers, marked bronze-brown on wing reverses.

CRATAEGUS (krah-TEE-gus)

Hawthorn or Thornapple. Member of the Rose Family, nearly all hardy and they make the finest specimen trees and shrubs for the lawn. Nearly all of them come true from seed and are easily grown; the seed germinates slowly and should be sown in a flat or pot and placed

CRUCIANELLA

(kroo-shan-EL-ah)

(Crosswort). Annual and perennial plants, many of which are grown in the rock garden.

- stylosa.** CRUC-1. Pkt. 20c

Rock garden plant, in light soil and partial shade, while a perennial it is usually grown as an annual; prostrate habit and light growth, bearing round heads of small deep pink flowers.

CRYPTANTHE (krip-TAN-the)

(Cryptantha). Slender plants of the Forget-me-not Family, annual and perennial, with racemes of yellow or white Forget-me-not flowers; not common in American gardens. They are suitable for sandy, sunny exposures in the rock garden.

- sheldonii.** CRYP-1. Pkt. 30c

This comes to us from India and we are sorry not to have any exact description, but it is recommended.

CUPHEA (KEU-fe-ah)

Tropical and sub-tropical plants grown mostly in greenhouses in the N. and outdoors in the S. Easily grown from seed as tender annuals.

- Butterfly Hybrids.** CUP-1. Pkt. 15c

At a distance the plants seem to be covered with gay fluttering butterflies. Colors lavender, white, lilac, rose, purple, pink, rose purple, crimson and the most intense fire scarlet; this is one of the better annuals, 2-ft.

- lanceolata.** CUP-2. Pkt. 15c

Quite different from the Hybrid, flowers having two upper petals of velvety black maroon and the four smaller lower petals of bright crimson; a very attractive annual.

- miniata Vermilion.** CUP-3. Pkt. 15c

CURCULIGO (kur-KEU-li-goh)

Tropical plants of the Amaryllis Family. Palm-like dwarf plants and very useful plants in the warm greenhouse, standing

- White Queen.** COS-3. Pkt. 15c; 1/2 oz. 45c

- Mixed Queen.** COS-6X. Pkt. 15c; 1/2 oz. 45c

- hybrid Orange Flame.** COS-12. Pkt. 15c; 1/2 oz. 45c

Vivid orange, blooms in 90 days, 2 1/2-ft. plants.

HYBRID VARIETIES:

- hybrid Orange Ruffles.** COS-10. Pkt. 15c

Double, vivid rich orange butterfly-like semi-double blooms, very free flowering.

- hybrid, Yellow Flame.** COS-11. Pkt. 15c

Bright clear yellow, a brand new shade in Cosmos, flowers single 2-2 1/2-in. across, on 3-ft. plants.

- Double Crested, Mixed.** COS-8. Pkt. 20c

Extra early, with double crested flowers.

- Late Mammoth Single Mixed.** COS-7. Pkt. 10c

Double Mixed. COS-13X. Pkt. 15c

- Peerless, Double Mixed.** COS-9. Pkt. 15c

Eight wide petals with a Bachelor-button-like center, a beautiful blend containing crested and fluted type flowers.

COSTUS (KOS-tus)

Tropical plants related to Hedychium, with leaves that assume rich coloring when grown in heat, the flowers themselves are not very showy

lieve this to be the best strain of Dwarf Dahlias obtainable. Few blooms measure less than 3-in. and on 12-in. stems, profusely borne the first year. Some lovely new colors are: shades of canary yellow, scarlet, terre cotta, apricot, crimson, lavender, pink, purple, maroon, buff, cream, white, etc.

—**Giant Flowering.** DAHL-3. Pkt. 15c
Giant flowers, the seed saved from an exhibition collection.

—**Mignon.** DAHL-8. Pkt. 25c
Very large single flowers in bright colors, 1½ ft.

—**Paeony-flowered.** DAHL-9. Pkt. 25c
Double and semi-double flowers in enormous size, an English grown strain.

—**Unwin's Dwarf.** DAHL-10. Pkt. 30c
Resected and improved English strain having semi-double flowers, 2 ft.

DATURA (dah-TEU-rah)

Annuals and perennials found in the warmer regions, a few being very ornamental on account of their large trumpet-shaped flowers. Easily grown, treat as tender annuals.

—**black.** DATU-6. Pkt. 30c

DELPHINIUM

Under this heading are listed the perennial species; the annuals are listed under Larkspur. Delphiniums are probably our most popular flower, especially in the better planned gardens. They really are very easily grown; fine plants require air circulation, rich light alkaline soil and good seed strains. Locate in the garden so that they have some protection from the strong winds, give space between plants, not closer than 2-ft., and if you want them for cut flowers only, plant in 3-ft. rows, with plants 2-2½ ft. apart in the row. A light sprinkling of agricultural lime, with well rotted manure is best for the soil; after plants have become established a mulch over the soil is fine. Usually the plants can be cut back after flowering, and a second bloom will result, a light dressing of well rotted manure at this time will benefit the plants. The best time to plant seed is about Aug. 1st. when new crop seed can be had and the plants will reach sufficient size to make the proper size for blooming the following summer; however, seed can be sown anytime from early spring to Sept. The handling of the seedlings and plants is the same as with any regular sowing. You will find that the varieties and strains of those we offer are the very best obtainable, regardless of the price. Those using quantities of seed for plants, etc., should write us for quantity quotations, which will depend upon time of ordering and available seed supply; it will pay you to ask.

PLANTING DELPHINIUM SEED IN THE SPRING:

Germination can be gotten from early planted seed, Feb.-April, if you will place the seed as soon as received, in the freezing compartment of your refrigerator for 4-6 days and then plant immediately. Prepare the soil carefully, water it well, and let stand, during this period, so that the seed can be immediately started on their mission. As a rule 5-6 inch pots are best as you are not as liable to wash seeds all around as is the case with flats. Keep glass over them but ventilate well and remove condensation daily. Remove glass immediately when germination starts. Delphiniums germinate best in the dark (cover the glass with paper) and in warm temperature.

PACIFIC GIANT SERIES:

(Vetterle & Reinelt Original Seed)

One of the most popular strains at present having immense spikes 2½-3½-in. with flowers closely set which does not scatter after cutting. They come about 65% milky resistant and 100% double; a truly remarkable strain.

Prices on all series: Pkt. 35c; 3 pkts. 90c;

—**Black Knight Series.** DELP-1. Pkt. 35c

The darkest violet. Individual flowers 2½-3 inches in diameter; of beautiful round form, with heavy velvety texture, which gives the color luminosity and vividness not seen before in Delphinium. Very long, well-formed spikes; a true show flower with black bees.

—**Blue Bird Series.** DELP-2. Pkt. 35c

A true blue Delphinium has been the hardest thing to produce. We can safely recommend this series as being the clearest medium blues, with white bees. They not only come true to color but carry well-formed; round flowers 2½-in. in diameter, on very long, graceful spikes. The habit is, all one could desire in modern Delphinium and this series sets a new standard in blues of today.

—**Blue Jay Series.** DELP-3. Pkt. 35c

The color is striking, clear medium to dark blue; very intense and alive, with dark, contrasting bee.

—**Cameliard Series.** DELP-4. Pkt. 35c

A clear lavender self with white bee, possessing classical perfection of form of the individual flowers, which are very round and attain very large size, averaging 3-inches in diameter. Beautifully balanced spikes, combined with excellent growing habits.

—**Galahad Series.** DELP-5. Pkt. 35c

The greatest achievement in giant whites, fully worthy of its name, which possesses all the qualities one expects to find in a fine Delphinium. The standard attained in this series is perhaps respons-

—**fastuosa.** DATU-1. Pkt. 10c

(Angel's Trumpet). Double Mixed.

—**Metel.** DATU-2. Pkt. 10c

(Also known as D. cornucopia). Annual to 5-ft. with large double flowers, whitish inside and violet outside with purple calyx.

—**Trumpet-in-Trumpet.** DATU-5. Pkt. 20c

Blossoms intensely double and ruffled. Comes mostly in soft yellow, with occasional variations into rich cream or pure white, 36-in.

—**wrightii.** DATU-4. Pkt. 20c

An easily grown vigorous annual with very large flaring trumpet flowers of palest roseate lavender; texture softly downy, 3 ft. (Syn. D. Meteloides).

DAUBENTONIA

(daw-ben-TOHN-ya)

Herbs and shrubs of the Pea Family, with leaves divided into many pairs of small leaflets. The pea flowers are borne in loose racemes, and range in color from white to yellow, red-purple, and orange-red. Require indoor culture in the North, and are rather short-lived.

—**texana.** DAUB-1. Pkt. 25c

able for the wide popularity it met, ranking in demand next to the blues. The clear white flowers, with white bees, are of large size, reaching often 3-in. in diameter, combined with glistering, heavy texture.

—**Guinevere Series.** DELP-6. Pkt. 35c

A clear, pink-lavender self with white bee; with very large individual flowers averaging up to 3-in. in diameter. This is a true exhibition type and a beautiful garden plant.

—**King Arthur Series.** DELP-7. Pkt. 35c

This is still one of the most brilliant Delphiniums so far developed. The color is a rich, royal purple, with a velvety texture and large white bee, and the beautifully formed, long spikes are carried on thin, woody stems.

—**Round Table Series.** DELP-9. Pkt. 35c

As the name implies, this represents all of the color combinations of the Knights and their Ladies which will eventually be introduced. This year some three hundred different crosses were used to make up this group, combining all the newest color developments and possessing size that will make them invaluable for show purposes.

—**Summer Skies.** DELP-8. Pkt. 35c

Light, heavenly blue of a summer sky with white bees representing the fleecy clouds; a color long sought in the large hybrid Delphinium. The 1947 series has reached stability where they come almost 100% true to color from seed. As a class this is the finest blue Delphinium today in existence.

—**Saier Series Blend.** DELP-10. Pkt. 35c

A carefully hand made blend of the above series, not a mixture, especially of value to the flower grower with limited space.

SERIES MIXTURE

—**Series Mixture.** DELP-11X. Pkt. 25c;

Contains most of the series, but based mainly on surplus. Quality exactly the same as above.

NOTE: Those wanting first delivery in July or Aug. on new crop seed should book their orders as early as possible. The 1947 crop was the poorest in our experience, very late, with the seed actually dribbling in. It was most unsatisfactory.

The following Belledonna types of Delphinium, while not as large as the Pacific Giant Strains, they, however, are much to be preferred in those sections where the summers are hotter and not so moist. They will, in these sections succeed where the others will fail. One will just have to try them out in his own particular garden and treatment. More resistant to disease.

—**belladonna, True.** DELP-12. Pkt. 20c;

Lovely clear blue. ¼ oz. \$1.00

—**Blue Grotto.** DELP-18. Pkt. 35c

A deep indigo-blue variety, early, English grown, HP, 3 ft.

—**Cliveden Beauty.** DELP-13. Pkt. 20c;

A lovely turquoise blue, a good florist strain too. ¼ oz. \$1.50

—**Bellamosum.** DELP-15. Pkt. 15c;

Rich deep blue form of Belledonna with small white bee, flowers 2½-in. across. ¼ oz. \$1.25

—**Hollyhock Strain.** DELP-14. Pkt. 25c;

Selections of light shades, exceptionally fine for florist's use. ¼ oz. \$1.75

CHINENSIS:

While these are perennials they have the added advantage of being grown as annuals from early started seed. They are robust and sure bloomers. Popular for cut flowers. Last for many years and covered with flowers all summer and fall; rarely need staking.

—**Tall Mixed.** DELP-16. Pkt. 15c;

2-3-ft. tall, all shades of blue and white. oz. \$1.

—**Dwarf, Mixed.** DELP-17. Pkt. 15c;

About 1-ft. tall, in all shades of blue and white. oz. \$1.25

—**gyrans.** DMOD-1. Pkt. 35c

—**gyrans.** DMOD-1. Pkt. 35c
Telegraph Plant. Grown in the greenhouse; a tender Asiatic species with purple flowers; its leaflets have the power to move in several directions; perennial grown as an annual, easy from seed.

DIANTHUS

In this classification are a great number of annuals and perennials all low growing and known under different names, viz., Carnations, Pinks, Sweet Williams, Picotees, etc. They are all fragrant and beautiful flowering plants and excepting for a few Alpine species, they all can be grown anywhere, enjoying sun and a moist garden soil. The annual sorts should be planted early in the spring; either indoors or out, the perennials can be started indoors early in the spring, or sown as late as Aug. for plants old enough to winter over when they will flower profusely the following summer. Do not mulch Dianthus during the winter, they are best left alone as the crowns often rot if too much

moisture collects and they can not quickly dry out.

—**allwoodi.** DIAN-1. Pkt. 25c

A hardy hybrid race of D. plumarius and D. caryophyllus. Flowers from early spring till late fall in all colors except yellow; petals entire or variously fringed; have the free flowering and clove scent of the plumarius with the heavy texture of the carnations. About 25 seeds per packet. 5 for \$1.00.

—**alpinus.** DIAN-2. Pkt. 20c;

Flowers first year from seed, July-Aug.; prefers lime soil, fragrant, flowers single, in shades of lavender, rose and pink and in many different colored centers, 4-8-in. tall. 1/16 oz. 55c

—**arenarius.** DIAN-3. Pkt. 20c

Deeply fringed and richly fragrant rock garden species, white, cream and pale pink flowers; has sweet fragrance found in all Dianthus, very desirable, 6-in. tall.

—**caesius, gr. fl.** DIAN-16. Pkt. 15c

(Cheddar Pinks). Tufted foliage, 3-in. tall, 6-in. flower stems, bright pink daintily fringed flowers in May and June; ideal rock garden plant.

—**deltoides.** DIAN-77. Pkt. 50c

(Maiden Pink). Small rosy purple flowers; dwarf turf habit, and fine for edging or the rock garden, HP, 6 inches.

—**deltoides, Brilliant.** DIAN-26. Pkt. 25c

(Maiden Pinks). A brilliant rich rose-pink variety, HP. Pretty, fragrant.

—**erecta.** DIAN-27. Pkt. 20c

Crimson flowers on short erect spikes.

—**fragrans.** DIAN-78. Pkt. 30c

A favorite white single Pink, powerfully fragrant, HP, 1 ft.

—**Knappi.** DIAN-42. Pkt. 20c

Pure lemon yellow, an unique color in Dianthus and a real addition to the flower garden; grow it with Jasione perennis for a delightful blue and yellow effect, 18-in. tall.

—**latifolius atrococcineus.** DIAN-43. Pkt. 15c

(Everblooming Sweet William). Double flowers of deepest glowing crimson, erect, long in bloom, 1-ft.

—**monspessulanus.** DIAN-45. Pkt. 25c

Large fragrant flowers with deeply fringed petals, varied colors with many nice shades of pinks. Showy rock garden, border or bedding plants, 1-ft.

—**neglectus.** DIAN-48. Pkt. 50c

(Glacier Pink). Small odorless red-purple flowers, the toothed petals tawny underneath.

—**nigricans.** DIAN-69. Pkt. 30c

Foliage and stems dark purple, flowers dark red, HB, 1½ ft.

—**nobilis.** DIAN-68. Pkt. 20c

—**subcaulis.** DIAN-90. Pkt. 30c

An attractive rock garden species with pretty pink flowers, HP, 9 inches.

—**Sundermann.** DIAN-81. Pkt. 50c

A Macedonian species with large white flowers, rare, HP, 6 inches.

—**Species Mixed.** DIAN-83. Pkt. 35c

An English grown mixture of Dianthus species suitable for rock gardens, old walls, pavements, etc., HP, 1 ft.

SWEET WILLIAM Dianthus barbatus.

While these are biennials they are best grown as hardy annuals, especially in the N. All are about 1½-ft. tall, excellent in beds and for cutting; they flower in June when cut flowers in the garden are scarce.

—**Single Annual Mixed.** DIAN-66. Pkt. 20c

An annual flowering strain of Sweet William, which if planted early will bloom profusely.

—**auriculaeiflorus.** DIAN-70. Pkt. 25c

Auricula-eyed Sweet William. The old fashioned type, grown in England, HB, 1½ ft.

—**Dazzling Red.** DIAN-7. Pkt. 10c

—**Giant White.** DIAN-12. Pkt. 10c

—**Harlequin.** DIAN-6. Pkt. 10c

Has white, rose and red shades of color on one head.

—**Masquerade.** DIAN-8. Pkt. 10c

Salmon and white.

—**Newport Pink.** DIAN-9. Pkt. 10c

Beautiful single salmon-rose.

—**Pink Beauty.** DIAN-72. Pkt. 25c

A charming strain in many shades of salmon-pink, HB, 1½ ft.

—**Purple Beauty.** DIAN-10. Pkt. 10c

Bright deep purple single flowers.

—**Scarlet Beauty.** DIAN-11. Pkt. 10c

—**Single Dark Crimson.** DIAN-4. Pkt. 10c

—**Single Holborn Beauty.** DIAN-29. Pkt. 10c

Very large eyed on pretty single flowers in mixed colors.

—**Single Auricula-Eyed Mixed.** DIAN-5. Pkt. 10c

—**Mixed Single Sweet William.** DIAN-66. Pkt. 10c; oz. \$1.25

—**Single Dwarf Alpine Mixed.** DIAN-14X. Pkt. 20c

This dwarf, compact form of single Sweet William is ideal for rock gardens and low edgings; the clusters of many colored bright flowers are set snugly over the tip of the 6-in. tall plants during late spring and early summer; sow seed in July or Aug. for the next year's bloom. Although a hardy biennial it is usually more satisfactory to make sowings annually; in favorable locations, plants often live over 2-3 years.

—**Double, Mixed.** DIAN-15X. Pkt. 10c;

oz. \$2.00

—**Mixed Sweet William.** DIAN-73. Pkt. 25c

This is a T&M English grown strain of the very best single flowered varieties, HB, 1½ ft.

CARNATIONS—DIANTHUS caryophyllus.

Some of the types are also called Clove Pinks. They are especially noted for their fragrance, the whites being the most pronounced and the reds the least. The greenhouse carnation belongs under this heading as well as many hardy sorts as listed below. As a general rule seed should be started indoors for early plants or up until Aug. for outdoor plants for the next year flowering. Space a foot apart and the larger the flower, the more necessary it is to supply supports.

—**Enfand de Nice, Mixed.** DIAN-17. Pkt. 25c

This is the result of a cross between Chabaud's Giant and Perpetual; the plants are robust, upright habit, with long strong stalks bearing 2½-3-in. flowers, a magnificent strain coming 75% true from seed and 90% double.

—**Giant Perpetual.** DIAN-18. Pkt. 25c

The largest flowered clove-scented strain for garden use; similar in habit, for form, percentage and earliness to the Chabaud Giant Improved. Under cold frame forcing it will produce excellent commercial cut flowers.

—**Teicher's Biennials.** DIAN-20. Pkt. 50c

A large, long stemmed, hardy perennial Carnation of highest merit, 2-ft.

—**Chabaud Giants.** DIAN-21. Pkt. 35c

(D. marguerite). Everblooming Carnations are as easily grown as the D. Marguerite, flowering about 6 months from time of sowing, they have the added advantage, tho, of being truly everblooming, producing without interruption during the whole summer, large and fine, very double flowers. A fine type of Carnation, 16-20-in. tall, of good habit; strong, stiff stems, colors coming true from seed and up to 95% very double flowers. Excellent for growing in pots, for beds and for cut flowers. Sow in Jan.-Feb. flowering from Jan. till winter sets in.

—**Chabaud Giant Mixed.** DIAN-21T. Pkt. 35c

An extra fine English grown strain of Giant Carnations, excellent for cut flowers or garden decoration, flowering in 6 months after sowing seed, HP, 1½ ft.

—**Perpetual Flowering.** DIAN-75. Pkt. 90c

An especially fine T&M strain of double flowered Carnations, grown for us in England, mixed varieties, HP, 2 ft.

—**Crimson Bedder.** DIAN-76. Pkt. 75c

A hybrid pink of great beauty, bright crimson, single flowers, HP, 2 ft.

—**English Giants.** DIAN-67. Pkt. 50c

A fine strain of large flowered hardy Carnations in mixed colors, HP, 1½ ft.

—**Giant Double Marquerite.** DIAN-22. Pkt. 25c

Mixed colors, plants bloom within 6 months from seed planting, HP, 18-inches.

—**Grenadin, Mixed.** DIAN-28. Pkt. 25c

Splendid mixture of these 18-22-in. plants, HP.

—**Grenadin, Giant Malmesdon.** DIAN-23. Pkt. 35c

Largest sized flowers, fragrant and one of the most satisfactory garden types.

—**Grenadin, Tausendschon.** DIAN-19. Pkt. 50c

A new variety, color varying from delicate rose to salmon rose, its flowers are faultless, double and regular shape, excellent cut flowers, HP, 18-22-in.

—**Mauser.** DIAN-24. Pkt. 50c

A new Swiss race, 95% double flowers, with a rich color blend, exceptionally good.

—**Early Dwarf Vienna.** DIAN-25. Pkt. 35c

Extra choice strain of double flowered bright colors and free blooming; especially good for bedding as well as cutting; while biennial, treat as an annual, starting seeds early indoors, 15-in. tall.

—**heddensis, Westwood Beauty.** DIAN-30. Pkt. 15c

An entirely new tetraploid variety combining the large open flowers of D. heddwigi with the rugged growth and long stem habit of D. chinensis. Well formed 2-in. flowers in large numbers, stems 16-in. suitable for cutting and more tolerant of extreme temperatures than either of its parents. Color variable in red, shades of crimson and scarlet, single, lacinated, 1-ft., Hardy Annual.

—**Schonheit.** DIAN-31. Pkt. 20c

A pretty new Swiss variety just received, HA.

—**Finest Mixed.** DIAN-32. Pkt. 15c;

½ oz. 70c

HEDEWIGI:

Dianthus chinensis, Indian or China Pink. Introduced in 1713 and comes in various forms, double, single and lacinated and all large flowers, the best strains are of Japanese origin. Sow seeds after first of year for early flowering out of doors, from April to June for late summer and autumn flowering. They are also fine in pots carried over in cold frame and flowering from May on in 6 inch pots. All are hardy annuals and about 9 inches tall.

—**heddwigi, Fireball.** DIAN-33. Pkt. 15c

(Japanese Pinks). Double deep scarlet. Hardy annuals.

—**lacinated Mixed.** DIAN-34. Pkt. 10c

—**Double Mixed.** DIAN-35. Pkt. 10c

—**nobilis.** DIAN-36. Pkt. 15c

flats and handled in the cold frame until large enough to put in outdoor beds.

—**pulcherrimum.** DIER-1. Pkt. 25c
Reddish purple flowers, tall and slender habit, HP, 4 ft.

DIGITALIS (dij-i-TAY-lis)

FOX GLOVE. Erect biennial and perennial plants. Their stately spikes on steps 3-ft. or more high are crowded with thimble-like flowers, beautifully spotted. They are easily grown from seed sown in the spring or summer for flowers following season.

—**ambigua.** DIG-3. Pkt. 30c
Spikes of yellow flowers and a good perennial species (Syn. grandiflora), HP, 3 ft.

—**laevigata.** DIG-4. Pkt. 30c
A very pretty Foxglove with bronze-yellow flowers and whitish lip, HP, 3 ft.

—**lutea.** DIG-5. Pkt. 50c
A rare and attractive yellow flowered Foxglove, HP, 3 ft.

—**mariana.** DIG-6. Pkt. 40c
A distinct species with white flowers overlaid with golden chestnut, HP, 3 ft.

—**maculata superba.** DIG-7. Pkt. 30c
Giant spotted plants in a beautiful mixture. English garden strain, HP, 3 ft.

—**purpurea gloxiniaeflora.** The Shirley.
DIG-1. Pkt. 15c
Giant hybrid with blotched throat, extra color range, white to shell pink to deep rose, many nicely blotched or spotted with crimson, maroon or chocolate, largest flower spikes, 6-ft.

—**—Finest Mixed.** DIG-2. Pkt. 15c
Spotted throats, extra fine.

—**thaspi.** DIG-8. Pkt. 50c
A dwarf species with crimson flowers and pale throat marked with blood-red dots, HP, 1½ ft.

—**—** DIG-9. Pkt. 25c
A dwarf species with crimson flowers and pale throat marked with blood-red dots, HP, 1½ ft.

DIMORPHATHECA

(dy-mor-to-THEE-kah)
(African Daisy). Hardy annuals 1-2 ft. for sunny locations, blooming from early summer till frost; daisy-like flowers in ray and disc types, excellent for low beds and in rockery, especially for late color in the fall. In Cal. and Fla. and other milk states it is planted in the fall for winter flowers.

—**aurantiaca.** Orange Improved. DIM-1. Pkt. 10c
Deep pure orange-gold, 1-ft.

—**Golden West.** DIM-7. Pkt. 20c
(Fairy Bells). A genus of pretty perennials.

—**hybrids.** DIM-2. Pkt. 15c; ½ oz. 35c
Containing all colors, pure white to red and bluish, including lemon, sulphur and bright golden yellow, light orange, reddish yellow and pale salmon rose, 1-ft.

—**Special Mixture.** DIM-3. Pkt. 10c; ½ oz. 70c
Containing all varieties of this species.

—**calendulacea.** Lemon Queen. DIM-10. Pkt. 20c
Lemon colored flowers with blue-black central zone, pretty, HHA, 1½ ft.

—**berberiae.** DIM-8. Pkt. 25c
S. African annual with blue and white flowers, HHA, 2 ft.

—**Salmon Beauty.** DIG-9. Pkt. 25c
Pretty salmon shades, HHA, 1½ ft.

—**sinuata.** DIM-5. Pkt. 20c
Brightest, glossiest golden orange, flowers early and continues for 3 months, altogether charming.

—**All Mixed.** DIM-6X. Pkt. 10c; ½ oz. 75c

DISPORUM (dy-SPOH-rum)

Fairy Bells. Genus of liliaceous perennial plants of Lily Family with drooping white or yellowish flowers found in woods. The flowers are followed by attractive red or yellow berries. Very lovely in the wild garden, especially. Similar to Solomon's Seal.

—**oreganum.** DISP-1. Pkt. 20c
Creamy white flowers, 2-ft. tall.

—**—** DISP-2. Pkt. 20c
Creamy white flowers, 2-ft. tall.

—**—** DISP-3. Pkt. 20c
Creamy white flowers, 2-ft. tall.

DODECATHEON

(doh-de-KATH-e-on)
Shooting Star, American Cowslip. Small American perennial plants of Primrose Family, basal leaves and nodding Cyclamen-like flowers in rounded clusters. Flowers are white, rose or purple with reflexed petals. They grow naturally in half shaded woodland or rather damp mountain meadows, thus should be given moist, rich soil in partial shade in rock or wild garden or naturalizing, all with good drainage.

—**radicatum.** DODE-2. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-3. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-4. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-5. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-6. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-7. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-8. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-9. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-10. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-11. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-12. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-13. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-14. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-15. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-16. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-17. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-18. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-19. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-20. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-21. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

—**—** DODE-22. Pkt. 25c
Native of Mont. smooth light green leaves, pink or rose-red flowers on stout stem, 2-ft. tall, May-June, a fine one for a cool wet place in the garden; blooms at 6-in.

spring by abundant bright rose-pink flowers on one inch stems; hardy perennial.

DRACAENA (drah-SEE-nah)

Ornamental plants with brilliant and often variegated foliage belonging to the Lily Family. They are tropical plants and ordinarily grown in greenhouses. D. cordylina is the most common and sold as Dracaenas. Grow in rich soil, plenty of heat and moisture to promote a quick growth. Good light is required during winter for bright colors.

—**indivisa.** DRAC-1. Pkt. 15c; oz. 65c
(Properly Cordylina indivisa). The hardest of the group, sword-like green leaves, 2-3-ft. tall, used much as centers for baskets, window boxes, etc.

DRACOCEPHALUM

(dray-koh-SEF-ah-lum)

(Dragonhead). Hardy annuals and perennials with blue, purple or white flowers borne in whorls in the axils of the leaves or in spikes. They make pretty groups in moist shady places in the border. Easily grown from seeds. If in an exposed hot position the flowers are fleeting.

—**oldavicum.** DRPH-1. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-2. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-3. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-4. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-5. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-6. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-7. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-8. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-9. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-10. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-11. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-12. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-13. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-14. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-15. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-16. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-17. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-18. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-19. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-20. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-21. Pkt. 15c
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—**—** DRPH-22. Pkt. 15c
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—**—** DRPH-23. Pkt. 15c
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—**—** DRPH-24. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-25. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-26. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-27. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-28. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-29. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-30. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-31. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-32. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-33. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-34. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-35. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-36. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-37. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-38. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-39. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-40. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-41. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-42. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-43. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

—**—** DRPH-44. Pkt. 15c
Hardy annual, a charming variety with blue and white flowers in long leafy racemes; do not plant in a hot exposed position, 1-ft.

wild garden, and a few are grown in the rock garden. Easily grown from seed.

—**compositus.** ERIG-4. Pkt. 25c
Has feathery gray foliage, pale lavender flowers, 2-in. tall.

—**concinus.** ERIG-3. Pkt. 20c
Native of Mont. and Wyo., small blue, 8-12-in. tall, May-Aug. Easy to grow.

—**culteri.** ERIG-2. Pkt. 20c
Native of Mont., large white flowered species of the moist woods, 8-12-in. tall, July-Aug.

—**glabellus.** ERIG-5. Pkt. 25c
Pale blue flowers and smooth foliage, HP, 2 ft.

—**mucronatus.** ERIG-6. Pkt. 25c
(Syn. Vittadenia triloba). Flowers white changing to rosy pink, HP, 6 inches.

—**multiradiatus.** ERIG-6. Pkt. 40c

ERINUS (e-RY-nus)

Hardy European mountain perennial commonly grown in dry rock wall or crevices in the rock garden, blooming in April, flowers small red-purple and rising 3-4 inches above the matted foliage; excellent rock plant and for pots, HP, 6 inches.

—**alpinus.** ERIN-1. Pkt. 25c

—**—** ERIN-2. Pkt. 25c

—**—** ERIN-3. Pkt. 25c

—**—** ERIN-4. Pkt. 25c

—**—** ERIN-5. Pkt. 25c

—**—** ERIN-6. Pkt. 25c

—**—** ERIN-7. Pkt. 25c

—**—** ERIN-8. Pkt. 25c

—**—** ERIN-9. Pkt. 25c

—**—** ERIN-10. Pkt. 25c

—**—** ERIN-11. Pkt. 25c

—**—** ERIN-12. Pkt. 25c

—**—** ERIN-13. Pkt. 25c

—**—** ERIN-14. Pkt. 25c

—**—** ERIN-15. Pkt. 25c

—**—** ERIN-16. Pkt. 25c

—**—** ERIN-17. Pkt. 25c

—**—** ERIN-18. Pkt. 25c

—**—** ERIN-19. Pkt. 25c

—**—** ERIN-20. Pkt. 25c

—**—** ERIN-21. Pkt. 25c

—**—** ERIN-22. Pkt. 25c

—**—** ERIN-23. Pkt. 25c

—**—** ERIN-24. Pkt. 25c

—**—** ERIN-25. Pkt. 25c

—**—** ERIN-26. Pkt. 25c

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—**—** ERIN-28. Pkt. 25c

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—**—** ERIN-30. Pkt. 25c

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—**—** ERIN-33. Pkt. 25c

—**—** ERIN-34. Pkt. 25c

—**—** ERIN-35. Pkt. 25c

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—**—** ERIN-38. Pkt. 25c

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—**—** ERIN-40. Pkt. 25c

—**—** ERIN-41. Pkt. 25c

—**—** ERIN-42. Pkt. 25c

—**—** ERIN-43. Pkt. 25c

—**—** ERIN-44. Pkt. 25c

grace

GALTONIA (gaul-TOH-ni-ah)

Giant Summer Hyacinths. So. African bulbs of the Lily Family producing in mid-summer tall spikes bearing fragrant white or greenish drooping bell-shaped flowers. They are not hardy in the North and should be dug in the fall and stored indoors; in milder sections they be grown as perennial, especially with some winter protection.

—**candicans.** GALT-1. Pkt. 25c
Large Snowdrop-like flowers in long racemes, HbB, 3 ft.

GAMOLEPIS

—**lagetes.** GAMO-1. Pkt. 20c
Hardy annual from Europe, very early flowering, dwarf, flowers yellow.

GAULTHERIA

(gawl-THREE-ri-ah)

Evergreen woody plants of the Heath Family having rather small white, blue, red or black flowers. Most species are quite dwarf, some even prostrate, and are suited to the rock garden or the front of evergreen plantings; all are very desirable and very popular with collectors of ericaceous plants. The native Wintergreen is *G. procumbens*. Give the same treatment as Heaths and Rhododendrons, sandy peaty soil with plenty of moisture, best in light shade. Most species are not fully hardy in the North and must have protection.

—**hookeri.** GAUL-1. Pkt. 50c
A rare species from the Himalayas, apparently not in cultivation here as yet. The seed was just received from our collector in India.

GAURA (GAU-rah)

Perennial N. Am. plants with spikes or clusters of rose or white flowers for the border or wild garden.

—**lindheimeri.** GAUR-1. Pkt. 15c
Native of La. and Texas, flowers white with rosy cups, HA, 4-ft., perennial in dry soils.

GAZANIA (gah-ZAY-ni-ah)

Old time favorites for flowering in the greenhouse or for bedding outdoors during the summer; they have narrow leaves in varying forms mostly covered beneath with dense white woolly hairs; colors range from white, thru orange and yellow to scarlet, beautifully spotted at the base of the petals; sandy loam with humus, a sunny location suits them best.

—**splendens Mixed.** GAZ-1. Pkt. 20c
Hardy perennial, its trailing habit makes it a good rockery plant; flowers bronze, red, orange, yellow, cream, and white with brown and yellow spots about the center; flowers first summer and also a favorite in the cool greenhouse, 12-ft.

GENTIANA (JEN-shan)

All require good drainage and resent hot weather. Best started from seed which should be as fresh as possible, seeds are very small and usually slow to germinate. Some of the finest blues are found in the group and the plants are so beautiful and interesting that they will repay the trouble taken to grow them. We might suggest that you may place your order in advance for delivery as the fresh seed comes in. Some come from India.

—**armerium.** GERN-5. Pkt. 25c
Dark red flowers, robust habit and a fine border plant, HP, 1½ ft.

—**dahurica.** GENT-7. Pkt. 60c
A rare and distinct species having dark blue flowers, HP, 1 ft.

—**moerocraftiana.** GENT-2. Pkt. 25c
Plant with ascending many branches bearing beautiful funnel-shaped sky-blue flowers.

—**quadrifera.** GENT-4. Pkt. 25c
Dwarf plant bearing numerous stray blue flowers.

—**Rochellii.** GENT-8. Pkt. 25c
A strong growing species with clusters of blue flowers, HP, 1 ft.

—**septemfida.** GENT-9. Pkt. 30c
A real handsome species with blue spotted flowers, HP, 1 ft.

—**sikkimensis.** GENT-5. Pkt. 50c
One of the easiest species making mats of many shoots up to 6 inches tall. Flowers are rather tubular, about ¼ inch across, blue with white throat.

—**stylophora.** GENT-6. Pkt. 50c
A tall species, sometimes 6 ft. with leaves up to a foot in length and 5 inches across; flowers are widely funnel-shaped and up to 2 inches in length and straw-yellow. A very stately plant for the shady border, in rich soil; it may be slightly tender in the North.

—**longleisii.** GENT-3. Pkt. 25c
A much branched tall plant, flowers funnel-shaped, blue.

GERANIUM (jee-RAY-ni-um)

The Geranium of the florist and the common house plants are listed under Pelargonium; here under this list are the true Geraniums, mostly hardy plants. They have mostly lobed or divided leaves and showy flowers of many colors, usually under ½-inch but sometimes as large as 1½-inches. They are excellent for the border and the rockery and do well in any good soil; some are well adapted for naturalizing.

—**collinum.** GERN-4. Pkt. 50c
A very variable species that in its best forms is almost equal to the incomparable *G. farreri*. Leaves are small, deeply cut, and borne singly on stalks 3-4 in. long; flowers should be about 1 inch across and may be purple or even crimson; easy in the sunny rock garden and well worth trying.

—**grevilleanum.** GERN-1. Pkt. 25c
A creeping plant with kidney-shaped leaves, hairy and deeply cut; flowers as much as 2 inches across, pale rose, sometimes with large purple spots.

—**nopalense.** GERN-2. Pkt. 25c
A straggling plant found on banks and bearing small pink flowers.

—**sanguineum.** GERN-3. Pkt. 15c
Rounded plant 8 inches tall, 5-7 lobed leaves and reddish purple flowers.

GERBERA (GER-be-ra)

Tender perennial needing winter protection; the flowers are very popular for cutting and are extensively grown by florists. Start seeds in a warm place such as a sunny window, sowing seeds singly with points up just above the soil; in setting plants out keep crown just above the surface of the soil. Sunny location, well drained soil best; also makes fine pot plants for winter; 1½-ft.

—**jamesoni Hybrids.** GERB-1. Pkt. 25c
About 25 seeds in packet.

GEUM (GEE-um)

Easy to grow perennials, erect and generally dwarf, excellent for cutting and adapted for rock gardens, borders or beds. Bloom freely from May to Oct. Plants thrive best in light rich well drained soil in open sunny locations. Sow seeds in the open ground early in spring, 18-in. tall.

—**chiloense.** Fire Ball. GEUM-1. Pkt. 15c
—**Gold Ball.** GEUM-2. Pkt. 15c

—**Mrs. Bradshaw.** GEUM-3. Pkt. 15c
Large, rich double scarlet flowers, pretty.

—**Lady Stratheden.** GEUM-4. Pkt. 15c
Double golden yellow flowers, New.

—**coccineum.** GEUM-5. Pkt. 15c
Similar foliage, flowers bright red, 1-in. across.

—**Lady Stratheden.** GEUM-4T. Pkt. 25c
Rich golden yellow flowers, double, HP, 2 ft.

—**elatum.** GEUM-8. Pkt. 40c
A rock garden or border species from the Himalayas with enormous golden, or rarely white, flowers on stems of 6 inches to 2 ft. A woodland plant and best in light shade, HP.

—**montanum.** GEUM-6. Pkt. 15c
Golden yellow flowers, 1½-in. across, plants 1-ft. tall.

—**utbanum.** GEUM-9. Pkt. 75c
A rare species from India.

—**Mixed.** GEUM-7X. Pkt. 15c; 2 for 25c

GILIA (JIL-i-ah)

Annual, biennial and perennial plants mostly from W. No. Amer. of Polemoniaceae Family. Easily grown in ordinary garden soil, sowing seed where they are to grow.

—**achilleaeifolia.** GIL-2. Pkt. 10c
Bushy hardy annual to 2-ft., finely divided leaves and dense clusters of blue or purple flowers.

—**capitata.** GIL-3. Pkt. 10c
(Queen Ann's Thimble). Summer blooming, hardy annual to 2-ft. with dense roundish heads of light blue flowers, blooms continuously.

—**micrantha.** GIL-5. Pkt. 15c; ¼ oz. 35c
(Fairly Stars). Pastel shades of tiny single star-like flowers or neat 6-in. plants, hardy annual, excellent for rock gardens, ground covering or cutting for miniature bouquets. Salmon, pink, copper, yellow and cream. Star-like flowers on neat 6 inch plants, hardy perennial.

—**rubra.** GIL-4. Pkt. 15c
This is sometimes listed as *G. coronopifolia*.

(Tree or Standing Cypress—*Ipomopsis elegans*). Finely dissected leaves and a narrow panicle of scarlet flowers with orange or yellow markings, half hardy biennial best grown as annual, 6-ft.

—**tricolor.** GIL-6T. Pkt. 25c
White and violet flowers with yellow throat; a neat annual, HA, 9 inches.

—**tricolor.** Choice Mixed. GIL-6. Pkt. 10c; ¼ oz. 25c
Hardy annual with lilac flowers spotted yellow and purple in center; fine bloomer, 1-ft.

GLADIOLUS (glad-i-OH-lus)

A genus of tender cormous plants native of So. Africa and too common in the U.S. for an extended description. Growing them from seed is of special interest and much pleasure as well. The seed should be sown in rows in flats and placed in a cold frame until they have germinated and made some root growth; or better still, sow the seed in rows in a protected bed, where they can grow till fall, undisturbed. The corms must be dug before freezing weather and stored indoors over the winter.

—**Wonder Hybrids.** GLAD-1. Pkt. 50c
This is an English grown strain, which will produce flowers the first season from seed.

GLAUCIUM (GLAU-si-um)

Members of the Poppy Family usually grown as annuals although they are biennial and perennials; sunny situations where their large yellow, orange or red flowers with their bluish dissected leaves give a brilliant effect in the garden thruout the season.

—**Mixed.** GLAU-1. Pkt. 10c
(Horned Poppy). Hardy perennial, flowers scarlet and yellow, makes fine showing in the border, 2-ft.

GLEDITSIA (gle-DIT-si-ah)

Honey Locust. Shade and lawn trees. Soak seeds in hot water before planting.

—**tricanthos.** GLED-1. Pkt. 35c
Honey or Sweet Locust. This species is also used as stock for grafting choice specimens on.

GLOBULARIA

(glob-eu-LAY-ri-ah)

Little shrubby plants from the mountains of S. Europe and Asia, having blue and white flowers in rounded heads and grown in the rock garden; give a well drained soil in a moist and partly shaded location. Easily grown from seed.

—**tricosantha.** GLOB-1. Pkt. 25c
Globe Daisy. A neat little plant with small toothed leaves and small heads of pale blue fluffy flowers on leafy stems, HP, 8 inches.

GOSETIA (goh-DEE-shi-ah)

Attractive hardy annuals, bushy plants with masses of large pink, red and white showy flowers, for beds in sun or semi-shade, bouquets (all buds open in water). Thrive best in cool moist half shady situations, sow seeds broadcast late in the fall and allow to remain undisturbed when they will germinate quickly in the spring as the soil warms and then bloom profusely in late spring; they do not tolerate very hot sun.

—**GRANDIFLORA.** 1-ft. known in many farms and very popular.

—**Cherry Red.** GODT-10. Pkt. 25c
A tall double variety, HA, 2 ft.

—**Dwarf Single.** Sybil Sherwood. GODT-1. Pkt. 15c
1-ft., pretty salmon pink.

—**Dwarf Single Mixed.** GODT-2. Pkt. 10c; ½ oz. 50c

—**Dwarf Double.** Sybil Sherwood. GODT-3. Pkt. 15c
Salmon pink, lighter shaded edges, 15-in. tall.

—**Rich Pink.** GODT-8. Pkt. 25c
Double and an excellent cutting variety, HA, 2 ft.

—**Tall Double.** Mixed. GODT-4. Pkt. 10c

—**Schamini.** fl. pl. GODT-9. Pkt. 25c
A charming double variety with large bright salmon-rose flowers, HA, 2 ft.

—**azaleenschau.** GODT-7. Pkt. 20c
A beautiful new variety from Germany and most highly recommended, 2 ft.

—**grandiflora Mixed.** GODT-4T. Pkt. 25c
Tall double varieties in best mixture, English grown, HA, 2 ft.

—**Whitey.** Maidens Blush. GODT-5. Pkt. 15c
Annual, azalea-like flowers in pink suffused with salmon.

—**Orange Glory.** GODT-12. Pkt. 25c
A fiery orange-cerise color, HA, 1 ft.

—**Rosemund.** GODT-13. Pkt. 25c
Dwarf compact variety with large glossy bright pink flowers, HA, 1 ft.

—**White Swan.** GODT-14. Pkt. 25c
Masses of very large pure white flowers, HA, 1 ft.

—**Dwarf Varieties Mixed.** GODT-11. Pkt. 25c
Including the best named varieties.

—**Prize Mixture.** GODT-8. Pkt. 15c; ¼ oz. 80c

An extra special mixture.

GOMPHRENA (gom-FREE-nah)

Useful for bedding and cut flowers as well as for "everlastings". Start seed indoors as it does not germinate well in the open ground, remove the cottony coating before planting. Annual, clover-like blossoms; for drying, do not pick the flowers until well matured, protect from rats as they like the seeds.

—**rubra.** GOMP-1. Pkt. 10c; ½ oz. 35c
Purple flowers.

—**Piccolo.** GOMP-2. Pkt. 15c
A dwarf form with wine-red flowers.

—**Mixed.** GOMP-3X. Pkt. 10c; ½ oz. 70c
June-Aug., 2-ft., white, purple, wine-red, orange and pink.

GOURDS

Should be planted where they are to remain and not until the soil is thoroughly warm both night and day; the best location is a warm sandy soil somewhat on the dry side. Do not water much after the flowers appear, if watered too much blossoms and buds will drop. For perfect specimens the vines should be trained on a fence. Fruits must be well ripened, when stem becomes brown and hard and finger-nail cannot dent the shell; after picking, hang up in a dry airy place to thoroughly cure. The large shelled sorts are then washed and scrubbed before decorating and the small shelled sort just wiped clean of dust and given a light coating of shellac or varnish. There are so many different ways to use these ornamental fruits and they are so decorative during the winter that every garden should grow some. We have made up several blends to meet different demands, select the one meeting yours.

SMALL FRUITED VARIETIES.

(Cucurbita pepo).

—**Egg, White.** GORD-2. Pkt. 10c
—**Flat, Striped.** GORD-3. Pkt. 10c
Dark green, yellow striped.

—**Miniature.** GORD-4. Pkt. 10c
Fruits round, dark green and yellow striped.

—**Orange.** GORD-5. Pkt. 10c
—**Pear-shaped bicolor.** GORD-6. Pkt. 10c
Green and yellow.

—**Pear-shaped, striped.** GORD-7. Pkt. 10c
Dark green marked with longitudinal whitish bands.

—**Spoon.** GORD-9. Pkt. 10c
—**verrucosa, Warty.** GORD-10. Pkt. 15c
Small green warty fruits.

—**Small Fruited Mixed.** GORD-11X. Pkt. 10c; ½ oz. 25c; 4 oz. 90c

LARGE FRUITED VARIETIES:

(Cucurbita leucantha).

—**Bottle.** GORD-12. Pkt. 10c
—**Dipper.** GORD-13. Pkt. 10c

—**Hercules Club.** GORD-14. Pkt. 10c
—**Large-Fruited, Mixed.** GORD-15X. Pkt. 10c; ½ oz. 25c; 4 oz. 90c

GYPSOPHILA

(Baby's Breath). Both hardy annuals and perennials, their tiny flowers have an airy appearance; thriving in any soil and location, blooming in July to Aug. Sow seeds early in the open ground for the annual sorts, and for the perennials, plants can be started as late as Aug. so as to get size enough to winter over. They make excellent cut flowers and some make the best dried flowers.

—**ELEGANS.** Annual type, dainty small bell-shaped flowers for mixing in bouquets; blooms within 6 weeks from sowing. Sow as soon as soil is read in spring, and for cutting, plant every 10 days or so.

—**Carmin.** GYP-1. Pkt. 10c; ½ oz. 40c
—**Crimson.** GYP-2. Pkt. 10c; ½ oz. 40c

—**Rosea.** GYP-3. Pkt. 10c; ½ oz. 40c
—**Mixed.** GYP-4X. Pkt. 10c; ½ oz. 40c

—**New York Market.** GYP-5. Pkt. 10c; ½ oz. 35c; 4 oz. 95c

Pure white, largest flowered, with special emphasis placed on large and extra petioled flowers. Special strain for cut flower growers.

—**Covent Garden Market.** GYP-5. Pkt. 10c; ½ oz. 35c; 4 oz. 95c
Greatly improved strain, unusually large flowers of fine substance. Excellent florist stock.

—**mangini.** GYP-7. Pkt. 10c
(Mongolian Gypsophila). Hardy perennial, rose white flowers, tall.

—**murais.** GYP-8. Pkt. 10c
Hardy annual, 1-ft. rose colored flowers, solitary and auxiliary, dwarf, good rock garden subject.

—**oldhamiana.** GYP-9. Pkt. 15c
Bright flesh pink flowers, mid-summer till frost, 3-ft., perennial.

—**pacifica, Pink.** GYP-10. Pkt. 20c
Hardy perennial, good cutting and much branched plant of the *G. paniculata* type but later, more erect, clear rose-pink, 3-ft.

—**paniculata, double, Snowflake.** GYP-11. Pkt. 20c; ½ oz. 60c
Hardy perennial with tiny round flowers covering the plant. July to frost; excellent

for use in cut flowers and a very popular flower, 3-ft.

—**Snowstorm.** GYP-12. Pkt. 20c; ½ oz. 70c
Hardy perennial with flowers like tiny balls, covering the plant; flowers smaller than *G. elegans*, blooming all summer and fall and making the best of white cut flowers, making any bouquet much prettier with its misty effect; 3-ft.

—**Single White.** GYP-13. Pkt. 10c; ½ oz. 60c
Hardy perennial with tiny mist-like white flowers in profusion, June-July; nothing better for mixing in bouquets for its misty effect; it is also an excellent everlasting, the whole plant can be hung up in an airy place and dried for winter use, 2½-ft.

—**repens, Rose.** GYP-14. Pkt. 15c
An excellent perennial species, trailing dense carpet-like plant for rockeries, edging or border, rose color, June-July, HP, 6-in. tall.

—**White.** GYP-15. Pkt. 15c
Perennial, with white flowers otherwise same as above, HP, 6 inches.

HEDYCHUM (hee-DIK-i-um)

(Ginger Lily, Butterfly Lily, Garland Flower). Tropical plants of the Ginger Family mostly native of India. In frostless regions they are favorites in the open garden but greenhouse plants in N. Robust growers, 3-5-ft., with very ornamental foliage similar to that of the Canna, with sprays of spikes of fragrant flowers in white, cream, orange and pinks to scarlet. Rich soil, a peaty loam with sand, and good proportion of rotted cow manure.

—**coccineum.** HEDY-2. Pkt. 25c
One inch spikes of bright crimson flowers.

—**HEDY-9.** Pkt. 25c
Leaves are shorter and broader than those of *H. coccineum*, spike is denser and shorter, with salmon-pink or brick-red flowers with a larger lip.

—**densiflorum.** HEDY-4. Pkt. 25c
Spikes of white flowers.

—**gracile.** HEDY-7. Pkt. 25c
Flowers small greenish white.

—**spicatum.** HEDY-5. Pkt. 25c
Spikes 1-ft. long, flowers white.

—**thyrsiflorum.** HEDY-6. Pkt. 25c
Spikes, densely set with white flowers.

—**Mixed.** HEDY-8X. Pkt. 20c

—**coronarium.** HEDS-1. Pkt. 40c
(French Honeysuckle). Beautiful red flowers, HB*, 3 ft.

—**HELENIUM (he-LEE-ni-um)**
Mostly perennial plants with yellow flower heads, borne alone or in flat-topped clusters. Rich loamy soil best, and they make fine background planting in the border. Easily grown from seeds.

—**autumnale.** HELE-1. Pkt. 15c
Two inch heads of flowers whose rays shade from lemon yellow to deep red, to 6-ft. tall.

—**HELIANTHEMUM (hee-li-AN-the-mum)**
Sun-rose. N. American and Med. perennials thriving in dry limestone soils and full sunshine. There are many species all below 2 ft. and used in rock gardens, the border and for ground cover; flowers from July-Sept. Colors yellow, rose, white or purple.

—**obscurum.** HELM-1. Pkt. 25c
Bright yellow flowers and spreading habit, HSh, 6 inches.

—**vulgare.** HELM-2. Pkt. 25c
A very useful dwarf evergreen in many brilliant colors, HSh, 1 ft.

—**HELIANTHUS (hee-li-AN-thus)**
(Sunflower). Annuals and perennials. The flowers range from an inch or two to a foot in diameter, and they vary much in height. They make excellent border plants especially in the back ground, and where birds are sheltered the seed in the flower heads supply quantities of ideal food. Colors vary much although yellow predominates.

—**H. ANNUS.**
These are the annual Sunflowers, coming in many different forms. They are tender annuals and should be planted direct to annuals and should be planted directly in garden last half of May.

—**cuc. Starlight.** SUN-21. Pkt. 25c
Cucumariifolius type with Cactus-like flowers, sulphur-yellow and long twisted petals, HA, 4 ft.

—**Golden Tufts.** SUN-2. Pkt. 10c; ½ oz. 20c
Orange yellow heads.

—**Sulphur-yellow.** SUN-3. Pkt. 10c; ½ oz. 20c
Single, large flowers.

—**Stellata, Mixed.** SUN-6. Pkt. 10c; ½ oz. 20c

—**Dwarf Double.** SUN-7. Pkt. 10c; ½ oz. 20c
Height 5-ft., golden yellow, variegated leaves.

—**Aureole Reinland.** SUN-8. Pkt. 15c
A beautiful new German variety, wine-red zone and pure yellow ground, flowers varying in colors, they make up extra good for bouquets.

—**Russian.** SUN-9. Pkt. 10c; ½ oz. 20c; 4 oz. 35c
Tall single flowered, grown for seed and background display.

—**Annus, Red.** SUN-22. Pkt. 20c
An especially selected English strain having chestnut-brown shades, HA, 6 ft.

—**Tall Red.** SUN-10. Pkt. 10c; ½ oz. 20c; 4 oz. 35c
Tall growing, 8-ft., large red flowers.

—**Gerbera-toned.** SUN-11. Pkt. 15c
Sturdy well branched plants, 4-5-ft., bearing 3-in. flowers in pastel shades of rose, apricot, coral and red, mid-summer till frost.

—**Intermediate Hybrids.** SUN-12. Pkt. 15c
Intermediate type in many new hybrids; of Swiss origin.

—**Italian White.** SUN-13. Pkt. 25c
Cucumariifolius selection with flowers pure or creamy white or rarely soft primrose; brown centers.

—**T&M Strain.** SUN-14T. Pkt. 25c
This is an English grown strain of these fine hybrids, a striking strain in yellow flowers with broad zones of red, HA, 3 ft.

—**Excelsior Hybrids.** SUN-14. Pkt.

—mantegazzianum. HERA-1. Pkt. 20c
A stately plant for background, 8-ft. Fine for specimen plants.

HESPERIS (HES-per-is)

Hardy biennials and perennials of erect branching habit that bear white, rose or mauve-purple flowers in pyramidal spikes; excellent cut flowers, June-Aug. They are 1-3-ft. tall and their colorful display is enhanced by their sweet fragrance, give a sunny position in the border. Sow seeds outdoors in April or indoors in March, flowering the following seasons.

—Matronlis, Violet. HESP-1. Pkt. 10c; ½ oz. 25c
(Sweet Rocket). Best grown as a biennial.
—White. HESP-2. Pkt. 10c; ½ oz. 25c

HETEROPAPPUS

(het-e-ro-PAP-pus)

Hardy border plants with azure-blue aster-like flowers in summer; somewhat similar to *Boltonia*.

—Blaugrütl. AST-66. Pkt. 20c

HEUCHERA (HEU-ker-ah)

Herbaceous perennials usually dwarf, compact habit of growth; June-Sept., and valuable in low border or rockery; good loamy soil, sunny position, will produce mats of deep green, sometimes tinged with white or red from which rise slender stalks bearing airy clusters of bell-shaped flowers, excellent for cutting; plant seed early in the spring. Seed germinates best warm and in light.

—glabella. HEU-1. Pkt. 20c
Western native species.
—maxima hybrida. HEU-2. Pkt. 40c
Large flowers on stiff stems in white, deep rose and bright red.

SANGUINEA: (Coral Bells). Bell-shaped flowers, ½-in. long with prominent coral colored calyx, colors pink, rose and red, stems 12-18-in., July-Aug. HP, 1½ ft.

—Spitfire. HEU-3. Pkt. 20c
Large rich scarlet flowers, very pretty.
—splendens. HEU-4. Pkt. 20c
Vermillion colored flowers.
—hybrids. HEU-5. Pkt. 20c
Many different colored hybrids.

HIBISCUS (hy-BIS-kus)

Mallows flower in the late summer when other flowers are scarce, they like sunny positions, are quite hardy. The herbaceous group will bloom first season if started indoors very early, the genus is very large and variable. The annual kinds are very easily grown from seeds.

—Avalon Hybrids. HIBS-1. Pkt. 20c
Millar's crossed on Coccinea producing wonderful color variations, finest of all and different in every way; very hardy, color range from palest blush thru many tones of pink, then rose to reds, colors never before seen in *Hibiscus*; eyes are not common but are oddly rotated in deeper colors, long blooming season.

—homabo. HIBS-8. Pkt. 50c
—militaris. HIBS-2. Pkt. 15c
Very hardy and rugged, making a good herbaceous hedge, sown in position; flowers bell-shaped of soft pink with rose striations, easily grown, 4-ft.

—moscheutos, Hybrids. HIBS-3. Pkt. 15c
(Giant Mallow Marvels). Very satisfactory perennials easily grown from seed and make a dandy addition to the hardy border. These hybrids have a fine color range from palest blush thru pure pink to rose with snowy white and pure crimson; center eyes common, 4-ft.

—trionum. HIB-4. Pkt. 30c
Quick growing, long blooming annual with multitudes of big ivory-toned cup-blossoms centered with golden tassels, the petals patched violet at the bases; a very pleasing addition to the flower border, HHA, 2½ ft.

—manihot. HIBS-5. Pkt. 15c
(Sunset or Golden Bowl). Spectacular tall annual with big lemon-yellow flowers blotched purple-maroon; very showy, especially valued for showy plants in the background, 7-ft.

—Hibiscus, Mixed. HIBS-6X. Pkt. 15c

HIERACIUM (hy-er-AY-shi-um)

Perennial composite plants with red, orange or yellow flowers, some of which are called Hawkweed. They are easily grown from seed; those listed are all attractive and useful border or rock garden plants. The leaves are in rosettes with the flowers in heads on erect stalks.

—villosum. HIER-1. Pkt. 25c
A showy rock plant with yellow flowers and silvery leaves, HP, 1 ft.

HOLLYHOCKS (Althaea rosea)

These are all perennial, except Indian Spring, and do their best in deep, rich, well drained soil and like a warm sunny situation sheltered from wind. Group plantings, not too large, make attractive color in the background plantings. Plant seed early, either indoors or out. We list only the very best strains.

ANNUAL VARIETIES:

—semi-double, Mixed. HOLY-1. Pkt. 10c; ½ oz. 45c
—Single, Finest Mixed. HOLY-2. Pkt. 10c; ½ oz. 45c
—Indian Spring. HOLY-3. Pkt. 10c; ½ oz. 45c

Free flowering annual, semi-double rose and pink shades, 5-ft. tall.

PERENNIAL VARIETIES:

—Allegheny, Mixed. HOLY-4. Pkt. 10c; ½ oz. 45c
Semi-double flowers, 5-in. across.

—Begonia-Flowered. HOLY-15. Pkt. 15c
Large flowered, wide petals with pretty raised centers, very showy.

—Imperator. HOLY-5. Pkt. 15c
Beautiful fringed flowers in pink to cerise salmon, 5-ft.

—Triumph, Double Mixed. HOLY-6. Pkt. 15c
Flowers are waved and fringed with a distinct branching habit; unlike the tall Hollyhocks, these will make good showy displays in small groups as bush specimens, give 2-ft. space between plants, 5-10 in a group, 3-4 ft.

CHATER'S DOUBLE HOLLYHOCKS:
These grow about 6-ft. high and make very pretty displays in the border when planted in one variety for a bright showing. We offer one of the very best strains of these beautiful flowers.

—Colorado Sunset. HOLY-7. Pkt. 15c
A buff apricot seed and naturally attractive

in groups.

—Red Emperor. HOLY-8. Pkt. 15c
—Scarlet. HOLY-9. Pkt. 15c
—White. HOLY-10. Pkt. 15c
—Yellow. HOLY-11. Pkt. 15c
—Empress Strain. HOLY-12. Pkt. 15c; ½ oz. \$1.00

A Holland grown strain in mixed varieties of Chater's doubles.

—Chater Blend. HOLY-13X. Pkt. 15c; ½ oz. \$1.00

A hand made blend of above varieties in a well balanced color combination.

—Hollyhock Mixture. HOLY-14X. Pkt. 10c; oz. 80c
Contains double, semi-double and single varieties, including every type.

HORDEUM (HOR-de-um)

Ornamental grasses, both annual and perennial.

—jubatum. HORD-1. Pkt. 10c
(Squirrel-tail, Grass). Hardy annual, heads 4-in. long, nodding, with beards 3-in. long, use as an ornamental grass and if cut just after the spikes emerge from the sheath and dried, they make excellent winter bouquets, 2-2½ ft.

HOSTA (HOH-stah)

Plantain-lily. Funkia, Day-lily. Perennials with thick durable roots belonging to the Lily Family, native of China and Japan. They are widely planted for their foliage effect, the large glossy leaves making excellent accents at corners of beds, etc. They require a rich soil, do well in sun and some in shade. The flowers are in white or blue, funnel-shaped in loose clusters or racemes. They make fine hedges along a drive.

—sieboldiana. HOST-1. Pkt. 25c
Cream flowers tinged with blue and glaucous foliage, HP, 1½ ft.

HUMULUS (HEU-meu-lus)

Twining vines. (Mulberry Family) grown for ornament.

—japonicus. HOP-1. Pkt. 10c
Good and fast growing annual vine, 10-20 ft. from May planted seed.

—variegatus. HOP-2. Pkt. 15c
The green leaves are streaked and blotched white and are very decorative, seedling show considerable and interesting variations.

HUNNEMANNIA

(hun-e-MAN-i-ah)

(Mexican Tulip Poppy). Hardy perennial, doing best in sun, well drained sandy soil, survives drouth. Flowers yellow, tulip-shaped, 3-in. across and fine for cutting, if cut just before fully open, they will last a week. Treat as an annual sowing seeds early to have flowers the first season, 20-inches.

—fumarifolia. HUNN-1. Pkt. 10c
—Sunlite. HUNN-2. Pkt. 15c
Improved type, semi-double canary yellow flowers; the extra row of short petals on the outside instead of the inside, very fine.

HYDRANGEA (hy-DRAN-je-ah)

Deciduous shrubs belonging to the Saxifrage Family and valued as ornamental plants they have large clusters of showy white, pink or blue flowers. They thrive best in a rich moist soil and flower freely in open situations. Some are real hardy while others can be grown only in the South during the winter.

—robusta. HYDR-1. Pkt. 50c

HYOSCYAMUS

(hy-oh-SY-ah-mus)

Funnel-shaped flowers in spikes called Henbane, found on poor soil. Some species are grown for medicinal uses.

—niger. HYOS-1. Pkt. 10c

HYPERICUM (hy-PER-i-kum)

St. John's Wort. Perennial plants and shrubs, very decorative, usually with bright yellow flowers with many showy stamens. They grow easily in loamy or sandy soil, best in a semi-shady position; useful in the rock garden or the border. Most are not real hardy in the N. and if sheltered places, with winter protection, they can be grown even in Michigan. They are pretty plants.

—Hookerianum. HYPR-1. Pkt. 25c
—patulum. HYPR-2. Pkt. 25c
3 foot shrub with large solitary or clustered flowers.

IBERIS (y-BEE-ris)

CANDYTUFT. Small to medium sized annual and perennial herbaceous plants, native of S. Europe, hardy and easy to grow. There are two distinct kinds, the half hardy annuals and the perennials. The annuals are used in the rock garden and for edging or in pots, and will bloom the entire season if kept from seedling. The perennials bloom only in the spring. Both are low growing, do well in ordinary garden soil and require little care. Sow seeds of the annuals outdoors in mid-May as they do not take to transplanting. The larger the planting the better the effect. Germination is fast and growth rapid. The perennials can be sown in the fall.

—gibraltarica. IBER-1. Pkt. 10c
(Gibraltar Candytuft). Evergreen perennial with light purple or lilac flowers in flat clusters.

—jucunda. IBER-3. Pkt. 35c
Dwarf, 4-in. tall, perennial, pink flowers. Excellent rock garden plant.

(UMBELLATA: Globe Candytuft). Annual, branching freely, to 15-in. tall. This is the popular garden Candytuft, with many varieties.

—Giant-Hyacinth-Flowered. White. IBER-5. Pkt. 10c; oz. 50c

—Empress. IBER-6. Pkt. 10c; ½ oz. 50c
Large spikes of the purest white, erect habit.

—Hyacinth-Flowered White. IBER-7. Pkt. 15c; oz. 90c
Reselected Florist Strain. This is a superior strain, 15-in. tall with enormous trusses of uniform blooms.

—Best Mixed. IBER-8. Pkt. 10c; ½ oz. 40c
Umbellata, in all its colors.

ILEX (Y-leks)

Holly. Evergreen and deciduous trees and shrubs having glossy leaves and brilliantly colored berries. Some are tender but they all are very ornamental for the garden or for lawn specimens. Easily grown from seed.

—dissecta. IPOM-17. Pkt. 20c
Large seeded, wild Morning Glory, native of Texas, HP.

—hederifolia or nil. IPOM-10. Pkt. 20c
Ivy leaved strain, rapid growing vines, flowering in 6 weeks from seed. The source of the large flowering Japanese or Imperial forms. Colors blue, purple, pink, or rose.

—striped leaves. IPOM-11. Pkt. 20c
Same as above except it being a striped leaf strain, with large flowers.

—lindheimeri. IPOM-16. Pkt. 20c
Perennial vine with 1 inch purplish flowers, native of Texas.

—Nimbata, Hybrids. IPOM-12. Pkt. 15c
—imperialis, Mixed. IPOM-13. Pkt. 15c; oz. 50c

(The Japanese or Imperial Morning Glories). This strain is especially large, with a very good color selection.

—nociflora. IPOM-14. Pkt. 10c; oz. 40c
(Moonflower). Black seed. They are now classified as *Calonyction aculeatum*. Flowers open all night and close at noon, except on cloudy days, growing to 20-feet in good soil. Tender annuals. Soak and notch seed before planting; they can be started in small pots indoors a month earlier.

—Double Camella-Flowered. IMP-1. Pkt. 15c
Finest mixed, a beautiful flowered strain.

—Double Rose-Flowered. IMP-2. Pkt. 10c; ¼ oz. 50c
The double flowers are clustered in the axils of the leaves on short stems giving the plant a rose-like appearance, white, rose and red shades; full sun, rich soil, plenty of moisture, 20-in.

—Double Flesh-Flowered. IMP-13. Pkt. 35c
Bush-flowered, HA, 1 ft.

—Double Rose. IMP-14. Pkt. 35c
Bush-flowered, English grown strain, HA, 1 ft.

HOLSTI: Red-striped stems and flowers varying from white to scarlet; grown as greenhouse plants, house plants and for summer border subjects. Tender perennial.

—holsti. IMP-3. Pkt. 15c
—hybrids. IMP-4. Pkt. 15c
—Morganrothe. IMP-5. Pkt. 50c
Large flowering, salmon.

—Schottenglut. IMP-6. Pkt. 50c
Dark red, an especially fine plant.

SULTANI: Best known greenhouse subject. Long a favorite house plant. Easily grown and flowers indoors the year round. It can be set out in a partly shaded spot in the garden where it will form a bushy 15-in. plant, with an abundance of bloom.

—Karminzweig. IMP-7. Pkt. 50c
A new dwarf variety in a glistening carmine. Very choice.

—Hybrids. IMP-8. Pkt. 20c
—arguta. IMP-9. Pkt. 20c
9-inch plants bearing violet flowers in autumn.

—diffusum. IMP-10. Pkt. 20c
Small plant with funnel-like flowers in bunches.

—urticifolia. IMP-11. Pkt. 20c
Robust, erect plant with large pink flowers.

INCARVILLEA
(in-kahr-VIL-ee-ah)

Showy and fairly hardy perennials from China; plants produce terminal clusters of red or yellow flowers above the basal group of vivid green leaves; flowers tubular with a broadly expanded 5-lobed rim. Thrive in rich but light, well drained soil in sunny location. Plant seeds in spring or summer for flowering the following summer; in the N. give winter protection.

—delavayi. ICAR-1. Pkt. 15c
2-ft. tall, rose-purple flowers with yellow tubes, very fine, late flowering perennial.

—Olgae. ICAR-3. Pkt. 25c
Has sprays of pretty tubular rose-pink flowers and finely cut foliage, HP, 2½ ft.

—grandiflora brevipes. ICAR-4. Pkt. 25c
Large brilliant crimson-rose flowers, a handsome novelty, HP, 9 inches.

—variabilis. ICAR-2. Pkt. 25c
An easy to grow annual ever-bloomer, flowers are trumpets reminding one of Gloxinias, blending of cream into pale rose, foliage fern-like, 2-ft.

IPOMOEA (y-poh-MEE-ah)
(Morning Glories). Easily grown vines in any fairly good soil, never plant until soil is thoroughly warm, if too cold seeds will only rot, even in southern Cal. they should not be planted until late May. Filing a small notch at top of seed helps considerably in germinating; always select the driest, sandiest part of the garden, planting where they are to remain as they resent transplanting. Keep plants on the dry side to induce early and abundant flowering and sparse leaf growth; a poor soil is better than a rich one, and no fertilizer; best on wall, fence or trellis, about 8-ft. tall. See Convolvulus for other, so-called Morning Glories.

PURPUREA: This is the common garden Morning Glory which comes in many varieties as listed below.

—Cornell. IPOM-1. Pkt. 15c; oz. \$1.00
Large flower type, Morning Glory, with corolla red, bordered white flowers, free blooming, attractive bright green foliage.

—Heavenly Blue. IPOM-2. Pkt. 15c; oz. 60c
(Clarke's Early Strain). Sky-blue shading golden-yellow in throat, very early.

—Pearly Gates. IPOM-3. Pkt. 15c; oz. \$1.30
Vigorous, free blooming, pure white with faint creamy sheen near center.

—Rose Marie. IPOM-4. Pkt. 15c; oz. 70c
Only double flowered *Ipomoea*, deep rose, early flowering.

—Scarlet O'Hara. IPOM-5. Pkt. 15c; oz. \$1.00
Dark wine red, early, attractive foliage, 3½-in. flowers.

—White Magic. IPOM-6. Pkt. 15c; oz. \$1.00
Very early and free flowering. Large fleecy white blending to cream deep in throat, making a heavy cascade of flowers over trellis.

—Red, White and Blue. IPOM-7X. Pkt. 15c; oz. 70c
Equal mixture of Scarlet O'Hara, Heavenly Blue and White Magic, for those wishing a red, white and blue combination.

—Large-flowered Mixed. IPOM-8X. Pkt. 15c; oz. 70c
Blend of the above varieties.

—bona nox. IPOM-9. Pkt. 10c; oz. 40c
Purple throat shading to lavender, a night flowering favorite in the moonlight garden.

—dissecta. IPOM-17. Pkt. 20c
Large seeded, wild Morning Glory, native of Texas, HP.

—hederifolia or nil. IPOM-10. Pkt. 20c
Ivy leaved strain, rapid growing vines, flowering in 6 weeks from seed. The source of the large flowering Japanese or Imperial forms. Colors blue, purple, pink, or rose.

—striped leaves. IPOM-11. Pkt. 20c
Same as above except it being a striped leaf strain, with large flowers.

—lindheimeri. IPOM-16. Pkt. 20c
Perennial vine with 1 inch purplish flowers, native of Texas.

—Nimbata, Hybrids. IPOM-12. Pkt. 15c
—imperialis, Mixed. IPOM-13. Pkt. 15c; oz. 50c

(The Japanese or Imperial Morning Glories). This strain is especially large, with a very good color selection.

—nociflora. IPOM-14. Pkt. 10c; oz. 40c
(Moonflower). Black seed. They are now classified as *Calonyction aculeatum*. Flowers open all night and close at noon, except on cloudy days, growing to 20-feet in good soil. Tender annuals. Soak and notch seed before planting; they can be started in small pots indoors a month earlier.

—Double Camella-Flowered. IMP-1. Pkt. 15c
Finest mixed, a beautiful flowered strain.

—Double Rose-Flowered. IMP-2. Pkt. 10c; ¼ oz. 50c
The double flowers are clustered in the axils of the leaves on short stems giving the plant a rose-like appearance, white, rose and red shades; full sun, rich soil, plenty of moisture, 20-in.

—Double Flesh-Flowered. IMP-13. Pkt. 35c
Bush-flowered, HA, 1 ft.

—Double Rose. IMP-14. Pkt. 35c
Bush-flowered, English grown strain, HA, 1 ft.

HOLSTI: Red-striped stems and flowers varying from white to scarlet; grown as greenhouse plants, house plants and for summer border subjects. Tender perennial.

—holsti. IMP-3. Pkt. 15c
—hybrids. IMP-4. Pkt. 15c
—Morganrothe. IMP-5. Pkt. 50c
Large flowering, salmon.

—Schottenglut. IMP-6. Pkt. 50c
Dark red, an especially fine plant.

SULTANI: Best known greenhouse subject. Long a favorite house plant. Easily grown and flowers indoors the year round. It can be set out in a partly shaded spot in the garden where it will form a bushy 15-in. plant, with an abundance of bloom.

—Karminzweig. IMP-7. Pkt. 50c
A new dwarf variety in a glistening carmine. Very choice.

—Hybrids. IMP-8. Pkt. 20c
—arguta. IMP-9. Pkt. 20c
9-inch plants bearing violet flowers in autumn.

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—imperialis, Mixed. IPOM-13. Pkt. 15c; oz. 50c

(The Japanese or Imperial Morning Glories). This strain is especially large, with a very good color selection.

vinegar and lavender water; not being hardy it is not grown much in northern gardens and must be protected over winter by mulching with coarse material. Set plants 2-ft. apart in their permanent location, in a dry, light limy soil and full sun; in rich or moist soils they do not do so well and lack the fragrance produced in an ideal location. Formally listed as *L. officinalis* and *L. vera*; annual, 2-ft.

—*spica*. LAV-3. Pkt. 10c; ½ oz. 70c

—*Munstead Strain*. LAV-1. Pkt. 15c; ¼ oz. \$1.00

Dwarf, deep lavender, 1-ft., a choice strain.

—*Vilmoria Hybrids*. LAV-2. Pkt. 10c; ¼ oz. 60c

French hybrids, beautiful flowers.

LAVATERA (lav-ah-TEE-rah)

Fast growing, herbaceous annuals and shrubby perennials; the annuals are colorful with mallow-like flowers, easily grown. The perennials are specially suited to the West Coast section and all will bloom the first year with a little extra attention; do not transplant.

—*arborea*. LAV-1. Pkt. 10c

A shrubby biennial with dark veined magenta flowers, 6-10 ft. perennial grown as an annual.

—*trimestris* var. *splendens*, Mixed. LAV-2. Pkt. 10c

Hardy annual, white and rose-pink, mallow-like flowers on large plant for show or cutting, 3-ft.

—*Loveliness*. LAV-3. Pkt. 15c

A new and very highly recommended German variety, large rose flowers.

—*thuringiaca*. LAV-4. Pkt. 25c

Light blue flowers, HP, 4 ft.

treated as annuals in the N. and some-

LEONTOPODIUM

(le-on-tuh-POH-di-um)

The much prized Swiss Edelweiss (AY-del-vys). A tufted perennial with white woolly foliage and inconspicuous flowers, surrounded by floral leaves in star-like clusters; a most sought after subject for the alpine rock garden and sometimes grown in pots; requires rough sandy loam, plenty of room in rock pockets for its wide spreading roots and full sunlight; also good in border, best grown from very early planted seeds.

—*alpinum*. LEON-1. Pkt. 25c

LEPTOSYNE (lep-TOS-i-nee)

Sometimes described under *Coreopsis*; have somewhat succulent, finely divided leaves and long stemmed yellow flowers; treat as annuals in the N. and sometimes grown under glass in the winter; easily and quickly grown from seeds, doing well in a light soil and a sunny location.

—*maritima*, gr. fl. LEPT-1. Pkt. 15c

(Sea Dahlia). Leafy stem and flowers 3-in. across, yellow, 3-ft. tall, hardy annual.

—*stillmanni*. LEPT-2. Pkt. 15c

Leafy stems, smaller than *L. maritima*, golden yellow flowers, hardy annual, 1-ft.

LEUCADENDRON

(leu-kah-DEN-dron)

So. African trees or shrubs (*Protea* Family). Not hardy in the N. Grown outdoors in Southern Cal. and Fla. or under glass in N.

—*argenteum*. LEUC-1. Pkt. 25c

(Silver Tree). One of the most noted trees of the Cape of Good Hope region where it reaches 30 ft.; interesting and showy plant with its narrow silvery white leaves closely set upon the stems; the dried leaves are used for decorative purposes. Packet contains about 20 seeds.

LEWISIA (leu-IS-i-ah)

A genus of low growing perennials of the *Portulaca* Family with narrow fleshy leaves, often in rosettes, and pretty waxy or satiny cactus-like flowers, borne singly or in clusters. They are natives of the western states, perfectly hardy and should be given an open, well drained position in the rock garden and a mulch of leaves in the winter. Perfect drainage must be given them because of the thick starchy root which requires a period of rest.

—*redilva*. LEWS-1. Pkt. 35c

This is spoken of as "one of the finest four rock garden plants in the world" and was Lewis and Clark's best find. State flower of Meant. Has a dense rosette of narrow leaves above which rise beautiful silky short stemmed blossoms 1½-in. across, vary in color from white to deep rose.

LIATRIS (ly-AY-tris)

Perennial plants being borne close against long wand-like spikes, very attractive all summer and into autumn, effective when massed in the border. Easily raised from seed and easily transplanted.

—*spicata*. LIAT-1. Pkt. 20c

Long spikes of flirty purplish-rose flowers, hardy perennial, 5-ft.

LIGUSTRUM (li-GUS-trum)

Privet. Deciduous or evergreen shrubs native of Europe, Asia and Australia. Useful as hedges and very ornamental. Some are not hardy in the N., especially the evergreen species. Easily grown from seed.

—*confusum*. LIGS-1. Pkt. 25c

LILIUM

(Lily). Growing Lilies from seed has become a very popular hobby with flower growers; very fine bulbs can be easily grown from seed, sowing them in flats of good garden soil, sand and leaf mold, equal parts and covering ¼-in. deep; seed may be sown anytime, the growth is mostly root growth the first year, transplant out the second and by the third year good sized bulbs may be had, with many species even blooming within a year. Some sorts germinate readily, others longer and some of the hybrids very variable. We will mark offerings with planting symbols, as follows: (A) Sow March or April, outdoors or month earlier indoors, germinate in 3-6 weeks, transplant following spring to nursery row. Also can be grown as in next culture. (B) Best to start in frame or greenhouse in early spring or outdoors in the S. Germination 3-6 weeks, carry seedlings over in frame or cool house the first winter, transplanting them out in the spring. (C) April-June outdoors in well made seed bed, 2-5 months to germinate with top growth not appearing till following spring, transplant second year. (D) Plant outdoors in late fall, Nov.-Dec. in carefully prepared seed bed, germination and top growth the 2nd spring and transplant 3rd or 4th spring according to

growth. (E) Usually hybrids of very variable reaction. The easy ones follow (A) or (B) and the hard ones are best under (C). Note proper culture under each variety description.

NOTE: We can supply Lily Bulbs on almost every variety, either in the spring or the fall. Ask for the special lists.

Due to the continued unsettled conditions in Europe, we may not be able to offer as large a list in seeds as we should, but each week brings in a new variety

so that we hope to be able to extend the list considerably before the season is over.

—*giganteum*. LILY-1. Pkt. 20c

This seed comes to us from India, large shining green cordate leaves, numerous, white fragrant flowers in tall racemes. Culture D.

—*maritima*. LILY-4. Pkt. 25c

(Turks Cap). Purple with dark brown spots, 3½-ft. Culture C.

—*macrophyllum*. LILY-5. Pkt. 25c

(Notholirion). Source of seed India.

—*nepalense*. LILY-6. Pkt. 25c

Magnificent species of striking beauty, bell-shaped flowers on slender erect stems, greenish yellow outside and soft yellow within, flushed towards the base with purplish black, very sweet scented, rosy. Culture B.

—*philippinense*, *formosanum*. LILY-7. Pkt. 25c

(Philippine Lily). White tinted green at base, 1-3 ft. Culture B.

—*thompsonianum*. LILY-10. Pkt. 35c

(Notholirion). Many fragrant rose-pink flowers with deep purple anthers. This and *Notholirion macrophyllum* are reasonably hardy and quite easily grown, but produce their leaves in autumn and require careful protection to prevent damage by freezing; seed germinate irregularly, a few the first spring, others not for a year, HP, 2 ft.

—*wallichianum*. LILY-11. Pkt. 25c

White flowers, large, sweet scented. Culture B.

—*Lily Blend*. LILY-12X. Pkt. 25c

Containing 20 or more hardy species. Better try culture B. and C.

NOTE: We can quote on quantities of Lily seed but due to the uncertainty of delivery we would rather you inquire first—just drop us a postal.

LIMNANTHES (lim-NAN-theez)

Meadow Foam. Formally in the genus *Floerkea*.

—*douglasii*. LIMN-1. Pkt. 20c

Hardy annual plant with finely cut yellowish-green leaves and fragrant white flowers, shaded at the base into pink and yellow. This attractive little plant grows in masses in low damp places and is a lovely flower in the wild garden; easily grown from seed.

LIMONIUM (li-MOH-ni-um)

Statice, Sea Lavender, Sea Pinks. Common name for *Statice* and a highly prized flower in the greenhouse, border, rock garden and for dried flowers. As everlasting they are especially long lasting and of real value.

—*latifolium*. LIMO-1. Pkt. 15c; ½ oz. 95c

Perennial with immense lavender-purple heads, best in a dry location, 2-ft. Especially valued for floral designs.

SINUATUM: Biennial or perennial, grow as a hardy annual; leaves form a low rosette at base of the stiff angular branching flower stalk. These are very popular for dried flowers.

—*bonduelli*. LIMO-3. Pkt. 10c; oz. 65c

Golden yellow flowers, 2-ft.

—*caspium*. LIMO-10. Pkt. 15c

A dwarf species suitable for the sunny rock garden, with very small leaves and branching stems bearing many pale-lilac flowers. HP. 6-in.

—*Kampf's Tall Improved*. LIMO-4. Pkt. 10c; oz. 50c

Improve blue, especially valued on the market.

—*marktkonigen*. LIMO-5. Pkt. 15c

A new Swiss strain in a perfect blue.

—*Market Grower's Blue*. LIMO-6. Pkt. 10c; oz. 35c; ¼ lb. 85c

A standard market strain of value.

—*True Blue*. LIMO-7. Pkt. 10c; oz. 50c

A fine California blue market strain.

—*Pastel Shades*. LIMO-9. Pkt. 15c

—*Choice Mixed*. LIMO-8X. Pkt. 10c; oz. 45c; ¼ lb. 85c

LINARIA (ly-NAY-ri-ah)

Rather low growing plants, annual, biennial and perennial (*Figwort* Family), trailing and erect. The flowers are like miniature Snapdragons. The annuals should be started indoors. They are all easily grown from seed. Kenilworth Ivy formally classified here is *Cymbalaria muralis* (which see).

—*maroccana*, *Early Bouquet*. LINA-1. Pkt. 15c; ¼ oz. 80c

Grows 6-in. tall and covered with dainty flowers in shades of pink, rose, cream, yellow, lavender and white, blooming freely all summer and into the fall.

—*Fairy Bride*. LINA-2. Pkt. 15c; ¼ oz. 50c

A French strain similar to *Fairy Bouquet*.

LINDHEIMERA

—*Texana*. LIND-1. Pkt. 20c

Star Cup. An easy attractive everblooming annual with flowers that have five wide golden petals arranged to form both a star and a cup, cuts well, 2 ft.

LINUM (Ly-num)

Flax. Annual and perennial plants and shrubs having blue, white, yellow and red flowers. They are very popular in flower gardens. Grow in full sun, the annuals can be sown direct to garden; they do not stand frost. The perennials can be started indoors and some will bloom first year.

—*flavum*. LINM-1. Pkt. 20c

This is a pretty rock garden plant, perennial, golden yellow flowers, 1-ft. tall, half hardy in N.

—*nana compactum*. LINM-2. Pkt. 30c

An extra dwarf compact strain, 6-in. tall with yellow flowers, especially attractive in the rock garden.

—*grandiflorum*, *Blue*. LINM-3. Pkt. 10c; ½ oz. 40c

The most popular flowering Flax, annual, used much for cut flowers.

—*roseum*. LINM-4. Pkt. 10c; ¼ oz. 40c

Same in rose colored flowers.

—*rubrum*. LINM-5. Pkt. 10c; ½ oz. 40c

Same in red flowers. Very popular.

—*perenne*, var. *sibiricum*. LINM-6. Pkt. 15c

The most reliable perennial Flax. The flowers are a good blue, 18 inches.

—*lewisii*. LINM-7. Pkt. 25c

Nothing more graceful than this native Mont. blue Flax, 18-24-in. tall, June-July.

LOBELIA (loh-BEE-li-ah)

Annual and perennials, flowers generally blue or red. For garden purposes they are divided into the 2 classes. The annuals being most popular, are used as green house plants, in beds and also as edgings, they are tender annuals.

ERINUS: The main annual species, most popular as a small plant for the border. Start seed in Jan. or Feb. indoors for blooming size plants ready to set out in late May, when they will bloom till frost.

—*Blue Stone*. LOB-1. Pkt. 15c

New Dwarf plants covered with clear blue flowers, excellent for rock garden.

—*Cambridge Blue*. LOB-2. Pkt. 15c

Compact variety, in clear light blue flowers, pretty in rock garden.

—*Crystal Palace*. LOB-3. Pkt. 15c

This is a compact strain with rich deep blue flowers, dark foliage, 4-in. tall.

—*Dorothea*. LOB-5. Pkt. 15c

Dwarf strain in a bishop's violet.

—*Emperor William*. LOB-6. Pkt. 15c

This is a dwarf compact strain of this beautiful flower, color Cornflower-blue.

—*erecta*. LOB-12. Pkt. 20c

A compact form of the familiar *L. erinus*, from India, with blue flowers.

—*pumila splendens*. LOB-13. Pkt. 25c

A new Swiss variety with dark purple-violet flowers with large white eye, highly recommended, HA, 4 inches.

ERINUS PENDULA: Trailing type and especially useful for window boxes and hanging baskets, where the plants tend to hang from the box.

—*Sapphire*. LOB-8. Pkt. 15c

Dark blue, with large white eye, showy.

—*rosea*. LOB-10. Pkt. 20c

This is a species from India, described as "tall plant with short branches, rose or white flowers crowded in short racemes." Best to treat as an annual.

LOMATIUM (loh-MAY-shi-um)

Perennial plants of the Parsley Family found in dry soils in the W. U.S. They are good rock garden or front or border plants or in gravelly soils in the wild garden. Nearly or quite stemless, from 2-in. to 2½-ft. tall with flat heads of small white or yellow flowers.

—*macrocarpum*. LOMA-1. Pkt. 20c

Native Mont. species, white flowers, 10-14 inches, May.

LONAS (LOH-nahs)

—*inodora*. LONA-1. Pkt. 20c

The Golden. True golden yellow, a very good plant for edging and bedding, annual; use with *Ageratum* for yellow combination; also fine for winter dried flowers. Easily grown in any type of soil, space 10-in. apart for cutting, closer for edging or bedding, mid-summer bloom, 2-ft.

LOTUS

The genus is confused with the common name of water plants called *Latus*, which are *Nymphaea*. The correct genus belongs to the *Pea* Family. They are native to So. Europe.

—*tetragonolus*. LOT-1. Pkt. 15c

Winged *Pea*, *Asparagus* *Pea*. A creeping annual leguminous plant with purplish flowers and pods, which are edible when young. They thrive in sunny, dry locations and valuable for ground cover and on banks.

LUCULIA (leu-KEU-li-ah)

Tender shrubs from the Himalayas having large leathery leaves and showy corymbs of white, rose and red flowers; easily grown under glass in moderate temperature and bloom through the winter. They can be set outdoors during the summer where they make attractive plants.

—*gratissima*. LUCU-1. Pkt. 25c

The most reliable species, coming true from seed.

LUFFA (LUF-ah)

Loofah. Tropical climbing plants with large white flowers and cylindrical or oblong fruits. When ripe they have dry papery shells which contain a network of strong fibres which is commonly called "dish cloth" and is used for washing purposes. Culture same as for gourds.

—*Green Snake*. LUFF-1. Pkt. 10c

Very long fruits.

—*acutangula*. LUFF-2. Pkt. 10c

Dish Cloth. Large fruits.

—*cylindrica macrocarpa*. LUFF-3. Pkt. 10c

LUNARIA (leu-NAY-ah)

There are two important kinds, a biennial and a perennial that are used for dried flowers in this genus. The seed pods are flat and when matured, these open up, making a very pretty spray for use in bouquets or the entire plant can be used as a bouquet; the flowers are white to crimson.

—*biennis*, *Violet*. LUNA-1. Pkt. 10c; ½ oz. 45c

Honestly, Biennial, with shining silvery seed pods for winter decoration, 2-ft., Violet flowers.

—*White*. LUNA-2. Pkt. 10c; ½ oz. 45c

—*Dark Crimson*. LUNA-3. Pkt. 10c; ½ oz. 45c

LUPINUS (lu-PI-nus)

The flowers, shaped like those of the *peas*, are borne in great profusion on long stemmed spikes; both annual and perennial sorts are excellent for display in the border; sun or partial shade and requires moisture. Blooms May and June and if cut back will produce second crop of flowers, sow in open ground as they resent moving, being tap rooted.

—*arborescens*, *Lavender Tree*. LUP-1. Pkt. 15c

Tender Perennial shrub growing man-high with lavender flowers.

—*Yellow Tree*. LUP-2. Pkt. 15c

—*hartwegii*, *Giant King*, *Blue*. LUP-3. Pkt. 15c

Annual, 3-ft. this is a recently introduced

strain with larger flowers, closer spaced on longer spikes and in more distinct colors. Oxford blue.

—*Mixed*. LUP-4. Pkt. 10c; oz. 70c

Annual, 2-ft. in blue shades, white, yellow and rose.

—*nanus*, *Blue*. LUP-5. Pkt. 10c; oz. 60c

Small seeded type, native of California, 1-ft. annual. Blue.

—*Cruikshanki*. LUP-7. Pkt. 15c

White shaded yellow and purple, annual.

—*polyphyllus*, *Mixed*. LUP-8. Pkt. 15c; oz. 50c

Tall perennial with winged flowers blooming most of the summer, colors purple, white and rose.

—*Russell*. LUP-9. Pkt. 25c; oz. \$2.75

The most beautiful of all hardy Lupins, a rare and showy combination of color with bright pastel colors predominating.

—*subcarneus*. LUP-10. Pkt. 10c; oz. 45c

Texas Blue Bonnet. Small seeded, strong bushes, 15-in. tall bearing in June massive flower spikes closely set with large deep blue flowers.

—*Alaska Lupin*. LUP-11. Pkt. 15c

Blue Lupin, collected on Kodiak Island, and not yet identified but no doubt *L. Arcticus*, which is beautiful. 18-in., color cream, pinkish lavender, magenta and shades of purple and blue.

LYCHNIS (LIK-nis)

Brilliantly colored flowers and easily grown from seed; if sown early indoors most of the species will flower in June and July, ordinary garden soil and a fairly dry location with plenty of sun. They are related to the genus *Silene*. The dominant color of the species is red and the flower 5-petaled.

—*coeli-rosa*. LYCH-1. Pkt. 10c

Rose of Heaven. Crimson-red, a new variety and color. Free flowering annual, 1-ft.

—*Mixed*. LYCH-2. Pkt. 10c; ¼ oz. 25c

Rose of Heaven. Rose-red, red, white.

—*coronaria*. LYCH-3. Pkt. 15c

Mullein Pink, Rose Champion, Dusty Miller. Much branched biennial or perennial with wide woolly leaves and large crimson flowers, terminating each branchlet. Other plants are also called *Dusty Miller*, see *Centaurea*.

—*viscaria splendens*. LYCH-4. Pkt. 10c; ½ oz. 30c

Hardy perennial, fiery red flowers, 15-in. tall, very beautiful.

LYSIMACHIA (ly-si-MAY-ki-ah)

Loosestrife, which is also used for the genus *Steironema*, both requiring similar treatment and moisture situations. Perennial, bloom in summer, very pretty.

—*punctata*. LYSM-1. Pkt. 20c

Golden yellow flowers, blooming June-Aug.

—*ramosa*. LYSM-2. Pkt. 30c

MACHAERANTHERA

—*tanacetifolia*. MACH-1. Pkt. 20c

Takake Daisy. Most desirable for edging,

MARIGOLDS

We try to list every variety of Marigold that has any real merit and have dropped old varieties that have been replaced by newer and improved varieties.

The AFRICAN MARIGOLDS are strong feeders requiring plenty of water, therefore plant it in the richest, most favorable section of your garden. Seeds may either be sown where the plants are to remain or they can be started indoors and transplanted out in late May. Give the plants plenty of room, in most cases about 3-ft. apart.

The FRENCH MARIGOLDS are very light feeders and require a limited amount of

TALL AFRICAN NOVELTY TYPES.

AFRICAN MARIGOLDS. These are the large flower type, the plants usually 3-5-ft. high and the flowers up to 4-5-in. across. They make excellent displays in the flower border, can be used as hedges and produce great amounts of cut flowers. It comes in odorless foliage in some varieties.

—*Treasure Chest*. MARY-53. Pkt. 15c; ½ oz. 80c

Large *Chrysanthemum* flowered types with a wide range of color and bloom forms, all early flowering.

—*Crown of Gold*. MARY-1. Pkt. 10c; ½ oz. 60c

Collarette type with odorless foliage, golden yellow flowers.

—*Gigantea Sunset*. MARY-2. Pkt. 10c; ½ oz. 80c

Giant Flowered. Mixed. Huge flowers 5-in. across, colors orange, yellow and primrose, 3½-ft.

—*Full double huge deep orange flowers*, 3½-ft.

—*Orange*. MARY-3. Pkt. 15c; ½ oz. \$1.20

—*Golden Glow*. Mary-4. Pkt. 10c; ½ oz. 60c

Golden Yellow, Odorless foliage.

—*Mission Giants*, *Goldsmith*. MARY-5. Pkt. 10c; ½ oz. 90c

A new personality in Marigolds of exceptional merit. Plants about 1½-ft. with an extra amount of vigor and under field conditions the plants, which are base branching, produce 8-12 stems of excellent cutting bright blooms, 4-5-in. across and in almost perfect ball-shape.

—*Yellowstone*. MARY-6. Pkt. 15c

Golden yellow, incurved globular form, 2½ inch flowers and rather late, 3-5 ft.

TALL AFRICAN DOUBLE SORTS: Tall

All-Double (Fistulosa Type). An especially fine tall branching strain with enormous flowers of the quilled type. 100% double with huge perfectly formed flowers. They make excellent cut flowers and are favorites with the Florists, 2½-ft.

—*All-Double Gold*. MARY-7. Pkt. 10c; ½ oz. 80c

—*All-Double Lemon*. MARY-8. Pkt. 10c; ½ oz. 80c

—*All-Double Orange*. MARY-9. Pkt. 10c; ½ oz. 80c

—*All-Double Mixed*. MARY-10X. Pkt. 10c; ½ oz. 80c

—*Lemon Queen*. MARY-11. Pkt. 10c; ½ oz. \$3.00

bedding and cutting, best of the Blue Daisies. Flowers large blue-lavender with little golden centers and good length stems; foliage fern-like. Long blooming period, mid-June to Nov., sow seeds early and to get even germination place seeds in the refrigerator for a week, 20-in.

MACLEAYA (mah-KLAY-rah)

—*cordata*. MACH-1. Pkt. 15c

Plume Poppy or Tree Calandine. Formerly classed as *Bocconia cordata*. A tall plant with feathery sprays of small flowers held above the grayish-green leaves. Makes an effective background or specimen plant, perennial, 6-ft.

—*japonica*. MACH-2. Pkt. 15c

—*microcarpa*. MACH-3. Pkt. 25c

Similar to *M. cordata* in habit but seed vessels purple, HP, 6 ft.

MAGNOLIA (mag-NOH-li-ah)

Deciduous and evergreen shrubs and trees; many are very attractive when in bloom having very large flowers. Most of them are not hardy in the North and especially the evergreen sorts. They are difficult to transplant and thus when grown from seeds, more liable to come established. Grow in rich porous, moderately moist soil, preferring a sandy or peaty composition; seed can be started in pots and when established moved to their permanent location.

—*Campbelli*, *Mixed*. MAGN-1. Pkt. 25c

Flowers in white, pink and red, and purple outside, measuring 10 inch across, grows to 70 ft. tall and hardy from Va. southward.

—*Red*. MAGN-2. Pkt. 25c

flowers than the African; they are especially good for bedding and the smaller varieties, excellent for edging. Some make fine pot plants.

NEW HARMONY TYPES:

(Tagetes Patula).

—Gold Crest. MARY-22. Pkt. 10c; 1/2 oz. 50c

Golden yellow flowers, 2-in. crested centers of quilled petals surrounded by several guard petals, very early and free flowering, 8-in. tall.

—Golden Harmony. MARY-23. Pkt. 10c; 1/2 oz. 50c
Luminous golden yellow, both center and guards, compact 11-in. plants, 100% double.

—Golden Supreme. MARY-24. Pkt. 10c; 1/2 oz. 50c
Larger flowers than Golden Harmony and taller, 1 1/2 ft.

—Harmony. MARY-25. Pkt. 10c; 1/2 oz. 30c

Deep orange, maroon collar, broad petals and very even growth, early, 1-ft.

—Melody. MARY-26. Pkt. 10c; 1/2 oz. 50c

Clear, self golden yellow throughout, early, free flowering, 1 1/4 in. flowers, 1-ft.

—Orbit. MARY-27. Pkt. 10c; 1/2 oz. 35c

Golden yellow center, reddish brown guard petals, compact, 100% double, 1-ft.

—Spotlight. MARY-28. Pkt. 10c; 1/2 oz. 35c

Yellow center, mahogany border, 1 3/4 in. across, very early, 1-ft.

—Winter Harmony. MARY-32. Pkt. 10c; 1 oz. \$1.00

Tall, winter flowering greenhouse variety, golden orange crested centers with reddish brown guard petals, 2 1/2 in. across, very even growth, long stems, 100% double.

A striking brilliant blend of African and Dwarf Harmony. MARY-33. Pkt. 10c; 1/2 oz. 40c

Uniform 11-in. plants, coming in fanciful two tone combinations from lemon yellow to dark red.

—FRENCH—Tall Double (30-in.)

—Australian Giant. MARY-36. Pkt. 10c

Tall double, or gordon tree. Brownish yellow flowers, 2 1/2 ft.

—Josephine (Single Brown). MARY-52. Pkt. 15c

An especially good florist variety for cut flowers, grown outdoors, 3 ft. Color brown.

—Lieb's Tall Winter Flowering. MARY-35. Pkt. 10c; 1/2 oz. 50c

Deep brown, single and semi-double flowers for winter growing under glass.

—Tall Harmony. MARY-34. Pkt. 10c; 1/2 oz. 35c

Double Harmony hybrids, excellent for cutting or display.

—FRENCH DWARF DOUBLE:

—Robert Beist. MARY-48. Pkt. 15c

Rich maroon, 12 inches high.

—Royal Scot, All Double. MARY-37. Pkt. 10c; 1/2 oz. 50c

Dwarf, compact, 100% double, rich mahogany and gold in uniform stripes; extra select strain, 1-ft.

—Sunbeam. MARY-31. Pkt. 10c; 1/2 oz. 35c

Pure golden yellow, pretty, 15-in. tall.

—Double Monarch. Mixed. MARY-38. Pkt. 10c; 1/2 oz. 50c

Compact habit with large flowers, fascinating new shades; a rich color blend.

—FRENCH—Dwarf Single (10-in.)

—Ferdinand. MARY-49. Pkt. 15c

Single flowers, golden yellow flanked mahogany red, showy, early blooming and very free flowering, 20-24 inches.

—Fire Cross. MARY-41. Pkt. 10c; 1/2 oz. 50c

Single, dwarf, deep orange-yellow blotched maroon, 10-in.

—Flash. MARY-40. Pkt. 10c; 1/2 oz. 40c

New red and gold bicolor, a new single type. Large single flowers 1 3/4 in. across in glowing shades of tawny gold to mahogany, plants mound-shaped, ideal for borders and pots, also cutting, 15-in.

—Legion of Honor. MARY-42. Pkt. 10c; 1/2 oz. 40c

Single dwarf yellow blotched brown.

—FRENCH DOUBLE MINIATURE

—Butterball. MARY-21. Pkt. 10c; 1/2 oz. 50c

Soft butter yellow with maroon on center petals, very free flowering, 8-in. tall.

—Spry. MARY-29. Pkt. 10c; 1/2 oz. 50c

Yellow crested centers with red guard petals, 1 1/2 in. across, blooms in less than 9 weeks, 9 inches.

—Sunkist. MARY-30. Pkt. 10c; 1/2 oz. 50c

Bright golden-orange, dandy companion to Butterball, flowering very early 1 1/2-2 in. across, 8-in.

—Yellow Pigmy. MARY-47. Pkt. 15c

A very dwarf bright yellow, 10 in.

—Gem Mixture. MARY-50. Pkt. 15; 1/2 oz. 70c

A new Dwarf Marigold mixture we call your special attention to. Like the miniature varieties, such as Spry, from which this blend is made, the compact plants retain their neat form throughout the summer heat and continue to bloom from the earliest until frost.

—Signata pumila. MARY-44. Pkt. 10c; 1/2 oz. 70c

Tagetes. Bright yellow, tiny single flowers in great profusion on compact plant, fine for edging or filling up bare spots in rockery, 8-in.

—Little Giants. MARY-45. Pkt. 10c; 1/2 oz. 80c

Deep orange in color, only 6-in. tall, beautiful for edging or for bare spots in rockery, very free flowering, tiny single flowers.

—Gnome. MARY-43. Pkt. 10c; 1/2 oz. 50c

Tagetes signata pumila. A very dwarf compact single form, pretty orange color; beautiful edger and for rock garden, 6-in.

—MATHIOLA (mat-THY-oh-lah)

Stocks. Annuals and perennials (Crucifer Family) of which the garden species consists of 2 species and one belonging to Malcomia. The genus Cheiranthus is related and to which the Wallflower belongs.

M. incana (Queen or Brompton Stock or Gillflower). This is the main garden stock. It is perennial or biennial but grown as an annual and for late summer and autumn flowers. Seed is usually sown outdoors in May or June and bloom 15

weeks later, or start them 6-8 weeks earlier indoors. Keep at a temperature around 65 degrees. For greenhouse flowering seed is sown about end of Oct.

—Giants of California. Mixed. STOK-1. Pkt. 20c; 1/4 oz. 90c

Superb branching type producing immense spikes of 2-in. florets and averaging better than 70% double; one mammoth spike per stalk can be produced when transplanted 4-6 in. apart in beds. Best strain available for commercial growers.

—Early Colonial Branching. Mixed. STOK-2. Pkt. 20c; 1/4 oz. \$1.00

Extremely base branching, this type does not produce a large center spike; 12-15 branches per plant, bearing double florets, are typical of this strain, 2 1/2 ft.

—Mammoth Beauty of Nice. Mixed. STOK-3. Pkt. 15c; 1/4 oz. 50c

Comes into flower just as early as the Dwarf Ten Week Stocks and forms a pyramidal-shaped plant; this the most popular class for general garden use, 1 1/2 ft.

—Double Dwarf 10 Weeks. STOK-5. Pkt. 15c; 1/4 oz. 40c

This type is especially recommended for outdoor growing in the East and Middle West; blooming in 10 weeks from seed, 1-ft.

—Double Giant Excelsior. Balls No. 2. STOK-7. Pkt. 25c

Each plant produces one large flowering spike, white tinged with pink, greenhouse strain, 3-ft.

—Ball's No. 14. STOK-8. Pkt. 25c

Same as above with deep rose-pink flower.

—Gardenia. STOK-9. Pkt. 25c

Large single pure white flower.

—Mixed. STOK-11X. Pkt. 25c

The very best blend of single flowered varieties.

—bicornis. STOK-20. Pkt. 10c; 1/4 oz. 30c

Evening Stocks. A hardy annual, 15-in. high, sweetly fragrant after twilight hours or after a shower; small lilac flowers, July-Sept. Sow seeds indoors or plant out early in May.

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—capensis alba plenissima. MATI-1. Pkt. 20c

Feverfew. Also listed as Chrysanthemum parthenium. A perennial but grown as an annual. 2-ft. white flowers, used especially for mixing in bouquets of other flowers similar to Gypsophila.

—eximia gr. fl. Ball's Double. MATI-2. Pkt. 25c; 1/4 oz. \$1.00

One of the best white cut flowers, 20-in. tall.

—Golden Ball. MATI-3. Pkt. 20c; 1/4 oz. 85c

This variety forms a dwarf dense bush of over 12-in. in height covered with rich golden yellow ball-shaped flowers. It is of great value for pot culture and making up floral sprays.

—Silver Ball. MATI-4. Pkt. 25c

Same as Golden Ball but with white double ball-shaped flowers.

—MAURANDIA (mau-RAN-di-ah)

Perennial climbing plants of slender habit, native of Mexico and belonging to the Figwort Family. They are tender and can be handled as tender annuals for summer baskets or for winter flowering vines. Thrive in fibrous loam with leaf mold and some cow manure. Fine also for trellis.

—scandens. MAUR-1. Pkt. 25c

Annuals, biennials and perennials (Poppy Family). They generally require a cool moist summer and a rich warm sandy loam in a sheltered partial shady position. They make an attractive group in the border. The annuals should be started early indoors and set out after frost danger is over; the perennials are best carried through the summer in pots in cold frame and set out in Sept.

—bailei. MECO-1. Pkt. 25c

Perennial, very pretty with large blue Poppy-shaped flowers, for a cool place in the rock garden, June-July, 15-in. tall.

—beltonifolia. MECO-2. Pkt. 25c

Perennial, to 6-ft., blue or bluish-violet flowers, 2-in. across in flat top clusters and one of the finest blue flowers in cultivation but requires a good flower grower in the E. States. Shelter it from intense heat and drying winds and give applications of liquid manure during its flowering season.

—cathartii. MECO-5. Pkt. 20c

Perennial, golden yellow flowers, 2-3 in. across.

—cambrica. MECO-3. Pkt. 20c

Welch Poppy. Perennial, 1 1/2 ft., much-cut leaves with silvery sheen beneath and large solitary pale yellow Poppy-like flowers.

—horridula. MECO-11. Pkt. 25c

A very variable species with 5-petalled flowers of light to dark blue, pinkish or purplish, borne singly on very short stems; usually, but not always, biennial, 8 inches.

—nepalensis. MECO-6. Pkt. 20c

4-6 ft., stately plant, flowers dark purple or golden yellow in pretty racemes.

—rubra. MECO-9. Pkt. 25c

Same with purple Poppy-like flowers.

—simplicifolia. MECO-7. Pkt. 25c

Biennial with solitary Poppy-like clear blue flowers, 3 inches across, rising from the tufted rosette of leaves.

—villosa. MECO-10. Pkt. 50c

Used to be listed as Cathartii villosa. Heart-shaped leaves covered with white hair; golden-yellow poppy-like flowers on stems 1 1/2 ft. long.

—wallichii. MECO-8. Pkt. 25c

Satin Poppy. 4-6 ft. biennial forming a mound of finely cut, silvery foliage, and bears pale blue flowers 2-in. across.

—MELIA (MEE-li-ah)

Bead-tree. Deciduous or evergreen trees and shrubs native of tropical Asia and Australia. They can be grown only in the South.

—azedarach. MELA-1. Pkt. 35c

China-berry or Umbrella-tree. Grown in the South where it stands a few degrees of frost; grows to 50 ft., with graceful pinnate foliage, fragrant lilac flowers borne in loose panicles, followed by yellow oval fruits that remain for a long time.

MELOTHRIA

—scabra. MELO-1. Pkt. 15c

A perennial climber best grown as an annual, start seeds indoors setting out in May.

MESEMBRYANTHEMUM

(mes-em-bri-AN-the-mum)

These are tender plants, best grown in dry, gritty, well drained soil, care being used to water them from below; usually started indoors; low growing, fleshy, succulent plants, many of them having striking, glistening ice-like points on the foliage; they are natives of hot, dry barren parts of S. Africa. They are tender in the N. and when grown outdoors they must be wintered in a cool, well ventilated, greenhouse. In California and Florida, a number of them are grown in the open and due to the dry climate in the West, they do especially well. They make nice pot plants and should be given a light dry gritty soil with the best of drainage.

—criniflorum. MESE-2. Pkt. 25c

Livingstone Daisy. New. Very rich flowering in beautiful bright and varied colors.

—crystallinum. MESE-3. Pkt. 15c

Now Cryophytum crystallinum. Ice plant, an easily grown annual and used for a ground cover in mild climates and in porch or window boxes in the N.

—tricolor. Mixed. MESE-4. Pkt. 15c

Annual.

—MICHELIA (my-KEE-li-ah)

Asiatic shrubs and trees belonging to Magnolia Family. They are easily grown from seed; not hardy in the North but can be grown outdoors in the South.

—cathartii. MICH-1. Pkt. 30c

—excelsa. MICH-2. Pkt. 30c

—lanuginosa. MICH-3. Pkt. 30c

—MIGNONETTE

(Bot. Reseda, re-SEE-da, odorata).

These sweet scented plants are excellent for pots or boxes, beds and borders and the improved varieties make fine cut flowers; they are also excellent for bees, yielding a large amount of excellent honey; full sun or partial shade and best in moderately rich soil, sow seeds in open ground as they develop rapidly and resent moving; successful sowings will furnish seed it is best to grow them as annuals, starting seeds as early as the first of May, 6-15 in. tall.

—Allen's Defiance. MIG-1. Pkt. 10c; 1/4 oz. 25c

Individual florets are of immense size, compact plants, very fragrant.

—Machet Giant Flowering. MIG-2. Pkt. 15c; 1/4 oz. 40c

This is a special strain pyramidal growth.

—Machet Golden Goliath. MIG-3. Pkt. 15c; 1/4 oz. 40c

Special strain. Golden yellow flowers, large and very fragrant.

—Machet Red Goliath. MIG-4. Pkt. 15c; Special strain. Large red flowers.

—Machet New York Market. MIG-5. Pkt. 15c; 1/4 oz. 40c

Special Strain.

—Machet Special Mixed. MIG-6. Pkt. 10c; 1/4 oz. 35c

—grandiflora Improved. MIG-7. Pkt. 10c; 1/4 oz. 35c

—MIMULUS (MIM-eu-lus)

Tender annuals and perennials, having large, oddly shaped 2-lipped flowers of brilliant colors; excellent for boxes, baskets, house plants or for the border as well as for the greenhouse, the more tender sorts when grown outdoors should have some shade and protection from the wind and plenty of moisture. Germinate the seed at around 60 degrees. They are all grown as annuals.

—cardinalis. MIM-1. Pkt. 15c

—cupreus (tigrinus) Hybrid. MIM-2. Pkt. 15c

1-ft. tall, with flowers in contrasting stripes and spots in many colors.

—Espana. MIM-3. Pkt. 15c

Purple-garnet, yellow throat.

—guttatus. MIM-6. Pkt. 25c

More or less prostrate with brilliant inch long yellow flowers; hardy. From the Rocky Mountains.

—lewisii. MIM-7. Pkt. 25c

Large red flowers at 1-2 ft. Requires constant moisture and as cool as possible. Abundant at Logan Pass in Glacier National Park. A perennial growing masses the size of a wash tub along cold streams.

—Mixed. MIM-5X. Pkt. 10c

All varieties mixed.

—MIRABILIS (my-RAB-i-lis)

Four O'Clocks. Tender biennials grown best as an annual in the North, bushy plants with attractive red, pink, white, lilac and yellow flowers, flowers opening in the P. M. on sunny days, July to frost; space plants 2-ft. apart, 2-3 ft. tall. They make the best for border or bedding. For a hedge, plant them 1-ft. apart and in the border 2-ft. apart. Best to sow seed in the open ground about middle of May, they do not stand frost.

—jalapa. Mixed. MIRA-1. Pkt. 10c; 1/4 oz. 25c

Mixed Four O'Clocks in all the colors.

—Dwarf Variegated. MIRA-2. Pkt. 15c

Dwarf growing with variegated leaves, mixed colors.

—longiflora. White. MIRA-3. Pkt. 10c

Much larger flowers, sweet scented.

—Violet. MIRA-4. Pkt. 10c

—uniflora. MIRA-5. Pkt. 20c

Bright rose blossoms in trumpet-trumpet form, each long-tubed blossom rising from a second "flower" of the same vivid rose. Showy, and unusual. A free bloomer.

—Mixed Four O'Clocks. MIRA-6X. Pkt. 10c

All types mixed.

—MOLUCCELLA (mol-eu-SEL-ah)

—laevis. MULU-1. Pkt. 15c

Bells of Scotland. The branching stems are closely set in elongated hyacinth fashion with big bell-calices of pale, translucent green and within each calyx lies a curiously formed little white flower. Its a fine cut flower or the spikes can be dried for winter. Easily grown, does well in dry soils, perennial.

MORINDA (moh-RIN-dah)

Trees, shrubs and vines of Madder Family. They are tropical plants and can be grown only outdoors in the far South or as greenhouse specimen in the North.

—betenocoides. MORI-1. Pkt. 50c

—MYOSOTIS (my-oh-SOH-tis)

Forget-me-nots. They all prefer cool locations, partial shade and plenty of water in the soil, they are fine as edging plants and in boxes and baskets or bedding. In combination with Pansies or English Daisies, they make an effective display; also used in the rock garden or for ground cover in the rosery; while they are mostly perennials, they all need winter protection in the North where they can be carried over. Sow seeds early.

M. Sylvatica: Annual or biennial, 8-in. 2-ft.

—alpestris. A. Fischer. MYOS-1. Pkt. 15c

Very large flowered, deep blue, 8-in. This is a hybrid and correctly listed as Annamaria Fischer.

—oblongata perfecta. MYOS-2. Pkt. 15c

A fine winter flowering type, dark blue.

—Royal Blue. MYOS-3. Pkt. 15c

flowers; flowers soft Poppy-like blooms on end of upright spikes. They require dry soil and full sunlight, very easily grown.

—**drummondii.** OENO-1. Pkt. 15c
Light yellow, biennial grown as an annual.

—**lamarkiana.** OENO-2. Pkt. 15c
Evening. Scented Primrose. Yellow flowers 2" across, especially pretty in background plantings, 3 ft.

—**odorata.** OENO-3. Pkt. 15c
Yellow, sweet scented, biennial grown as an annual.

—**Mixed.** OENO-4X. Pkt. 10c

OPHIOPOGON (o-fe-o-PO-gon)

Turf-forming plants of the Lily Family, with racemes of small whitish flowers and grass-like foliage, often striped or spotted with white or yellow; useful for turf and border edgings, requiring no lifting; some rather tender in the N.

—**intermedium.** OPHI-1. Pkt. 50c

—**clarkii.** OPHI-2. Pkt. 50c

ORNITHOGALUM

(aur-ni-THOG-ah-lum)

Bulbous plants of the Lily Family with lily-like flowers in clusters at top of leafless stems. They are very pretty.

—**sandersiae.** ORNI-1. Pkt. 25c
A splendid addition to the group of easily grown bulbs for the summer garden; handle like Gladiolus, seeds germinate quickly and strongly, making excellent cut flowers which rise from pretty rosettes of glossy, channeled leaves and on stems 3-6 ft. long at the end of which is a great flower cluster that opens successive buds over a long period; flowers large wax-like petals of creamy white about center boss of olive black, very decorative in garden.

OSBECKIA (os-BEK-i-ah)

Little known plants of the order of Melastomaceae, ranging from herbs to evergreen shrubs; the flowers, with five obovate petals, are showy and borne in heads or panicles. While quite tender, they may be grown in the house or greenhouse during the winter and plunged outdoors in summer, best in light shade.

—**White.** OSBE-1. Pkt. 35c

OTHAKE

—**sphacelata.** OTHA-1. Pkt. 15c
Rosy Wings. This is definitely one of the better annuals of recent introduction and especially good in dry seasons; easy to grow, long blooming period, flowers 1" across and carried in clusters of many flowers, each flower having a dense double center enriched by wing-like 3-lobed petals in a very pleasing silver pink, 2 ft.

OXALIS (OK-sah-lis)

Small delicate plants, some useful in the rock garden, for bedding, hanging baskets and in the greenhouse. Usually best to start them in the spring, requiring an acid soil of a porous mixture of leaf mold, loam and sand; liquid manure if applied near maturity will encourage flower production.

—**corniculata purpurea.** OXAL-1. Pkt. 20c
The purple leaved bedding Oxalis with yellow flowers, a perennial grown as an annual.

OXSYPHORA

—**paniculata tropica.** OXSY-1. Pkt. 35c

—**nepalensis.** PEDI-2. Pkt. 50c

OXYPETALUM

—**caeruleum.** OXYT-1. Pkt. 20c
An easily grown hardy annual that, when sown in April, blooms by the end of June and continues till end of October. Also make a pretty pot plant; flowers 1" across, star-shaped in many flowered sprays, color an unusual blue of silvery veiled pastel quality as if printed on each petal.

PAEONIA

Peony. Only recently has interest developed in the various wild species many of which flower weeks before the border varieties, and make possible two months of peony bloom. The species are all single flowered, with varied and highly ornamental leaves, and of colors unknown in the border varieties, including pure yellow and bright scarlet. They are also very valuable for hybridizing and many new forms have been developed recently by crossing the species.

Peony seeds require a full year, in most cases, before the plant appears above ground. During the first season root growth only is made, but with the first warm days of the following spring, fair sized true leaves appear. Growth for the first season or two is rather slow, but later the plants develop rapidly. Three or more years are required to reach flowering size. Sowings may be made in an open ground bed in spring and no attention is required except to keep the bed free from weeds.

—**chameleone.** PEON-1. Pkt. 80c
The earliest flowering of all Peonies and one of the quickest and most vigorous from seed. It blooms a full month before the border varieties, with crinkled flowers 4 inches across, of pink or rose and rarely soft yellow. The leaves are very large and handsome, tinted brown in early stages of growth. The seed-pods are also highly ornamental, lined with rich red, while the seeds themselves are cobalt blue; apparently a true species, of unknown origin.

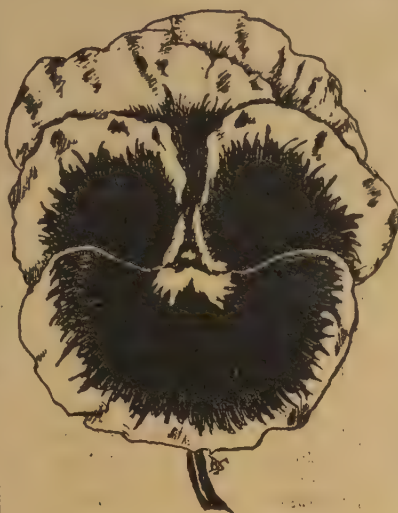
—**species mixed.** PEON-2. Pkt. 75c
From a large collection of European and Asiatic species. The color range is from bluish and pale yellow to deep red, with many intermediate shades. The mixture is probably strongest in P. woodwardii which makes a dense mound of fern-like leaves, over which are borne in profusion rather flat flowers, 3 inches or more across, of varying shades of pink. Included also are P. lobata with tulip-like flowers of intense scarlet, the most brilliant color known in Peonies; multi-colored P. chameleone, including yellow flowered and numerous others. These will flower for weeks before the herbaceous border sorts begin to bloom and offer a wealth of color for border and cutting, HP, 2-3 ft.

PANICUM (PAN-i-kum)

Large genus of annuals and perennials of the Grass Family, a few being of value as ornamentals.

—**capillare.** PANI-1. Pkt. 10c
Witch grass; grown for drying when they are mixed in bouquets; annual, 2 ft.

PANSY



We give particular attention to the strains and varieties we offer in Pansies and carefully check every source, and also from the results obtained by our customers, all over the country. In every case we supply the very best obtainable. These ordering new crop Pansies in the summer time can usually count on delivery about August 1st but there are seasons when this is later, sometimes 3-4 weeks.

Pansies are best grown as a hardy annual or biennial, especially in the North, but in the South they can be treated as biennials entirely. Do best in a sandy loam soil not exposed too much to the hot sun; they stand some shade; ordinary good garden soil with some leaf mold makes good soil, they require plenty of moisture. Seed can be planted any time from early in March, indoors, to late in August. Transplant the seedlings to flats as soon as their second leaf appears and as soon as the plants have developed into some size, set out in their permanent location and after the soil has become frozen at the start of winter they should be given a good mulch of course materials.

The Pansy bed should have a mulch of material, so as to hold the soil moist and to protect it from too much heat from the sun; this also protects the flowers from being soiled by the rain splashing mud onto them. For exhibition blooms remove all blooms until about 3 weeks before the show and then leave but 4-6 shoots per plant. Well rotted manure as a mulch will benefit the plants and flowers. If slugs or cut worms bother, spray with lead arsenate.

SWISS GIANTS OR ROGGLI TYPE

This is a very popular type, the plants are robust and the flowers very large with a full color range. Height about 6 inches.

—**Alpenglow.** PANS-1. Pkt. 25c; ¼ oz. \$1.25
Mammoth scarlet flowers.

—**Claret.** PANS-2. Pkt. 25c; ¼ oz. \$1.25
A beautiful wine-red.

—**Flame.** PANS-3. Pkt. 25c; ¼ oz. \$1.25
Orange-scarlet.

—**Mont Blanc.** PANS-4. Pkt. 25c; ¼ oz. \$1.25
Pure white.

—**Rheingold.** PANS-5. Pkt. 25c; ¼ oz. \$2.50
Deep golden yellow with dark blotches on lower three petals.

—**Ullswater.** PANS-6. Pkt. 25c; ¼ oz. \$1.50
(Lake of Thun). Marine-blue with darker blotch showing through. Very pretty.

—**White Beauty.** PANS-7. Pkt. 25c; ¼ oz. \$1.50
Free flowering pure white.

—**Yellow Master.** PANS-8. Pkt. 25c; ¼ oz. \$2.00
Pure golden yellow.

—**Best Holland Mixed.** PANS-9. Pkt. 25c; ¼ oz. \$1.25; oz. \$3.25
This is the best strain of one of the larger growers in the Netherlands and should be good.

—**W-F Special Blend.** PANS-11. Pkt. 25c; ¼ oz. \$1.25
This strain of Swiss Giants is from one of our best growers and is characterized by a predominance of rich wine colored flowers which far surpasses, in form and range of dark rich colors any blend of Swiss Giants, we have seen. Plants are uniformly compact and most of the blooms are waved, giving them the appearance of being frilled.

—**Super Swiss Giants.** PANS-12. Pkt. 25c; ¼ oz. \$3.00
An improved California strain with enormous flowers of fine texture and form coming in a remarkably fine color range and especially well marked, many being beautifully ruffled and curled; long stems and sturdy plants are characteristic of this particular strain.

—**Dwarf Swiss Giants.** PANS-13. Pkt. 25c; ¼ oz. \$3.00
A very dwarf compact new strain, extra early flowering in complete color range running to brighter colors.

VARIOUS STRAINS OF PANSIES:

—**America Blend.** PANS-14. Pkt. 25c; ¼ oz. \$3.00
An extremely bright blend, early flowering and dwarf with a good color range; plants sturdy, flowers large.

—**Coronation Gold.** PANS-15. Pkt. 25c; ¼ oz. \$3.00
Giant golden yellow blooms, this is a specialty with one of our European growers and is considered very high class, with out blotches or markings.

—**Engelman's Giants.** PANS-16. Pkt. 35c; ¼ oz. \$4.00
An early giant flowered strain on compact plants; flowers average 4" across and coming in a beautiful color range containing both light and dark shades with a good percentage of bronze and reds; never solid colors as each flower has a lighter tone around the edges of each petal.

—**Maple Leaf Giants.** PANS-17. Pkt. 25c; ¼ oz. \$3.25
A fine large flowered strain of good shape and substance, plants compact yet husky growers having a luxuriant dark green foliage and large leaves; color range both light and dark with rich dark velvety tones.

—**Masterpiece.** PANS-18. Pkt. 25c; ¼ oz. \$2.00
Dainty ruffled and frilled flowers, colors rich in red and brown shades, compact plants excellent for borders.

—**Orchid-flowered.** PANS-19. Pkt. 25c; ¼ oz. \$1.50
Medium sized flowers, beautifully waved and curled and in a wonderful color range, an European grown strain.

—**Scottish Exhibition.** PANS-20. Pkt. 35c; ¼ oz. \$3.00
Symmetrical strain of plants bearing 4" flowers of perfect form and substance; in a multitude of new and varied color combinations running to intense, heavily blotched flowers which are of circular outline with overlapping petals carried well above the foliage on stout stems.

—**Florist or Market Strain.** PANS-21. Pkt. 25c; oz. \$4.75
An European grown strain of the highest quality and especially offered to plant growers. Extra choice.

—**Trimardeau.** PANS-22. Pkt. 20c; ¼ oz. \$1.25
Brilliant mixture, extra choice and especially recommended where color effect is most prized in beds, border or edging. Plants are compact and especially free blooming, neat habit, very hardy; excellent blend in brilliant colors with some blotches, showy in mass planting.

—**hiemalis.** PANS-23. Pkt. 25c
Mixed, this type is the winter-flowering Pansy, in type like the Trimardeau but very early flowering.

TUFTED PANSIES: See Viola Cornuta.

PARIS

Related to Trillium, but with smaller flowers and needing the same conditions of rather open woodland. Its flowers are normally green and the plant is more curious than showy.

—**polyphylla.** PARIS-1. Pkt. 50c
A very striking plant 20-50 inches high with dark green leaves up to 6 inches long, the flowers are very large, the outer segments narrow and dark olive green, 4-5 inches long, the inner segments slightly shorter and yellowish green followed by a very large yellow or rust-colored berry; hardiness uncertain in the North.

PARKINSONIA

(pah-kin-SOH-ni-ah)

Tropical or sub-tropical trees and shrubs of Pea Family.

—**aculeata.** PARK-1. Pkt. 25c
Jerusalem-thorn or Rattana. Small thorny evergreen tree with feathery pendulous branches and loose clusters of fragrant yellow flowers; a fine hedge plant in far South standing dry conditions; easy from seed. Seed from Texas.

PARNASSIA (par-NAS-i-ah)

Belonging to the Saxifrage Family, these plants have smooth, mostly basal leaves and five-petaled flowers of white; like wet places, and are much beloved by wild-garden enthusiasts.

—**nubicola.** PARN-1. Pkt. 30c
One of the best, with inch-wide white flowers and rather broad leaves, heart-shaped at the base; about 1 ft. high.

—**palustris.** PARN-2. Pkt. 30c
Seed collected in Alaska and found in wet places, and swamps.

PAROCHETUS (pa-roh-KEE-tus)

—**communis.** PARO-1. Pkt. 35c
Shamrock-pea. Also known as Blue-oxalis. Low growing creeper of the Pea Family, with cobalt-blue flowers with pink wings; they are a very useful and popular pot plant for hanging baskets and flower the whole year. They do best in mixture of sand and humus in a semi-shaded place; in the North they are not real hardy; they also are fine in the rock garden.

PEDICULARIS

(pe-dik-eu-LAY-ris)

Wood-betony, Lousewort. Annual and perennial plants of Figwort Family. Flowers 2-lipped, spiked clusters in whitish or reddish colors. They are fine wild garden flowers.

—**groenlandica.** PEDI-1. Pkt. 25c
Flowers are elephant heads; trunk, ears and all. Grows in wet places, 12-18 in. tall, July.

PELARGONIUM

(per-ahr-GON-ni-um)

The genus to which the common Geranium belongs. It is quite distinct but related to the genus Geranium. The common house Geranium is listed under P. zonale. They do well in any good soil and many do well in naturalizing. The seed can be sown early, either indoor or out and the plants grown on in the usual way. Raising the various Pelargonium and Geranium plants is very popular but to actually grow them from seed with the added interest of developing new varieties yourself, is very interesting.

—**zonale.** Mixed. PELA-2. Pkt. 20c
An European strain of the common Geranium (jee-RAY-ni-um) saved from a special collection of prized plants. The growing of Geraniums from seed being a very interesting past time and many different kinds, colors and types resulting in interesting finds. Best grown in pots from the transplanting stage from seedlings and the pots plunged in coarse soil during the summer months, when the pots can then be taken indoors during the winter months for growth through the winter.

PENNISETUM (pen-i-SEE-tum)

A genus of ornamental grasses both annual and perennial; making the most beautiful plants for border or for specimens in the lawn as well as for effect in bouquets or for drying for winter use. Start seeds indoors in March growing the seedlings on in small pots if possible; give plenty of room and allow 12"-18" apart in the garden.

—**rupellanum.** PENN-1. Pkt. 15c; ¼ oz. 35c
Fountain grass. Very popular, with very narrow leaves, 2 ft. long; this is strikingly colored in purple, coppery-red and rose, 4 ft. tall.

—**villosum (longistylum).** PENN-2. Pkt. 10c; ¼ oz. 20c
Short leaves and 4" purplish spikes at end of 2 ft. stems. The long feathery bristles give a plume-like effect. While a perennial it should be grown in N. as an annual. Hardier than most species and a very pretty grass for the sunny border.

PENSTEMONS

A genus of perennial plants, both herbaceous and shrubby of the Figwort Family, all native of N. American and called Beardstongue.

Penstemons bloom in spring, some early and some late. They are mostly in the blue and purple range, with a few reds, but no good yellow or orange. They come in all heights and types of growth, suitable for almost any location. They are very floriferous and are lovely when the appropriate species are selected and grown happily; are likely to be disappointing when not happy or not suited to the location. They require no special type of soil, but certain fussy species will be short-lived unless the soil is very porous. Some kinds will do well only in rock gardens; others are more appropriate to the perennial border.

Penstemons bloom so heavily that they often exhaust themselves and die. They may usually be saved if the flower stalks are cut off after blooming, water well, and give a little plant food. Bone meal applied twice a year will help, and perhaps a very little complete fertilizer just after blooming. The idea is to induce new growth from the crown to replace the old flowering stalks.

In spite of the best of care, it is just the nature of Penstemons for a certain percentage of each planting to die each year for no apparent reason. The easiest way to offset this inconvenience is to have more plants than you need and thus not have to worry if some of them die. It is best to raise them from seed, which is not a difficult operation, and to set out twice as many seedlings as the space will hold. Natural losses will thin them out. The seeds germinate well if planted out.

—**aggregatus.** PENS-57*. Pkt. 40c

A floriferous and showy species with slender leafy stems, flowers large deep blue in tight clusters. The best of the cluster-heads, 1-ft. tall.

—**alamosensis.** PENS-79*. Pkt. 75c
A very rare species from southern N. Mex. which will be tender in the N. Rather tubular red flowers and glossy green leaves; for steep sunny banks, HHP, 2 ft.

—**albertinus.** PENS-5. Pkt. 40c
Alpine appearing species with a dense basal rosette of small green leaves and dense spikes of flowers, 8-12" high, in bright blue. A choice rock plant, one of the best in the Proceri Section; requires stony soil.

—**angustifolius.** PENS-6*. Pkt. 20c
Glaucous blue entire leaves, stem 1 ft. or so with blue flowers; also listed as P. caudatus.

—**auriberbis.** PENS-56*. Pkt. 50c

Neat little alpine appearing rock plant with many stems and enough flowers to become quite showy. Resembles P. angustifolius. Flowers 3/4-in. long, pale lilac to purplish blue with golden beard, 4-8-in. tall.

—**bicolor, typicus.** PENS-1*. Pkt. 50c
Yellow form, jagged bluish leaves, tall stems, 3 ft., with large flowers; seed was from an entirely light yellow stand.

—**bicolor, ssp. roseus.** PENS-2*. Pkt. 50c
A very rare Arizona form with rose-purple flowers.

—**brandegii.** PENS-3*. Pkt. 35c
A garden favorite easily grown, 2-3 ft. high, with large bells of clear pure azure-blue, flowers, very free flowering, very hardy.

—**bridgesii.** PENS-4*. Pkt. 35c
Sub-shrubby forming mats to 2 ft. across and 1 ft. or more high, flowers over a long season, intense scarlet tubular flowers with reflexed lower lip, it makes a fine rock garden plant, very hardy.

—**caudatus.** PENS-60*. Pkt. 30c

—**clutei.** PENS-7*. Pkt. 50c
A great rarity in nature introduced by Mrs. J. Norman Henry; toothed glaucous bluish leaves and widely inflated flowers of rose with a touch of orange; many branched, 3 ft., found growing only in volcanic cinders. This is a gem for the border or large rock garden, hardy in East.

—**cobaea.** PENS-63*. Pkt. 30c

—**comarrhenus.** PENS-8*. Pkt. 45c
Very rare and scattered in nature, rather slender, airy species with quite showy flowers which are of a particularly lovely hue, the perianths opening so that each of the very large flowers stand out beautifully by itself. "One of the most lovely species," for border or large rocky.

—**canescens.** PENS-76*. Pkt. 50c

A tall and rather leafy species for the rougher places in the border or for the wild garden. The quite large flowers in open clusters vary from pink to magenta, HP, 3 ft.

—**cobaea purpurea (Ozark Strain).** PENS-83*. Pkt. 50c

One of the showiest and most popular of all Penstemons, with very large and swollen flowers of rich violet-purple. Fine for the sunny border, especially in the Midwest, where it is being grown with great success; much better than ordinary P. cobaea, HP, 3 ft.

—**concinnus.** PENS-80*. Pkt. \$1.50

One of the rarest of all Penstemons, which had been found only once before our collectors procured seed in a little-known region of western Utah; rosettes of narrow, strap-shaped dull green leaves, finely hairy, and short stems bearing only 2-4 flowers of pale blue-purple, half an inch long. From desert mountains and should be grown in a dry sunny rock garden, HP, 3 inches.

—**confusus.** PENS-75*. Pkt. 75c
Closely related to P. utahensis but a smaller plant, with quite narrow blue-green leaves and tubular flowers of most unusual shades of rose and lavender. For the sunny rock garden, preferably in very stony soil, HP, 6-12 inches.

—**congestus.** PENS-59*. Pkt. 35c

—**cyananthus.** PENS-9*. Pkt. 75c
This has also 3 subspecies. Intense blue flowers in clusters, rather long stems, green leaves, 2 ft. tall.

—**deustus.** PENS-10*. Pkt. 60c

This also has 3 subspecies. A neat and attractive rock garden plant of fine habit, too small for the border, forming mats 1 ft. across with great quantities of stems 6"-9" tall, many white to ochroleucous flowers, 3/4" long. A rarity.

—**digitalis.** PENS-11*. Pkt. 25c

—**dolius.** PENS-67*. Pkt. 75c
A rare low growing species for the sunny rock garden; rosettes of narrow dusty green leaves and short spikes of inch-long blue-purple tubes; will stand much drought, HP, 6 inches.

—**eatoni, ssp. exsertus.** PENS-12*

doors in late fall; spring planting is apt to be less certain, often nothing more is necessary than to scatter seed around the parent plants each fall and let the self-sown seedlings renew the old plants. Penstemons can also be increased by cutting taken at almost any time during the growing season.

AMERICAN PENSTEMON SOCIETY

The American Penstemon Society is engaged in research right now to discover which are the best species for different locations and what are the best methods of growing them. There are about 235 species of penstemons, all native to our own country, many of them as lovely as the best flowers from foreign lands. Very little is known generally about them. Experimenting with them is an adventure for gardeners with the pioneering instinct who wish to try something new and unknown. Information about membership can be secured by addressing a postcard to the secretary, Ralph W. Bennett, 5607 North 22nd street, Arlington, Virginia. The information brought forth by the Society is published in its bulletins. Annual dues are \$1.00, Amel Priest, Peru, Iowa, treasurer.

NOTE: We believe we are headquarters for Penstemon Seed. All offerings are carefully certified. Those marked with an (*) after the symbol, viz. PENS-1* represents seeds secured from sources checked by the American Penstemon Society and can be relied upon to be true to their classification. We will be pleased to have anyone growing especially fine hybrids to contact us. There is a large and interesting field here for hybridization.

Extremely showy species, large leaved and erect growth with the large stems bearing long open spikes covered with red flowers. This sub-species is taller than type, to 4 ft. with anthers exerted from corolla.

—**eatoni, ssp. lanceifolius.** PENS-13*. Pkt. 40c

A Nevada form having narrow stem leaves.

—**eatoni, ssp. undosus.** PENS-14*. Pkt. 30c
A form with downy stems and big basal leaves, and the usual pendant tubes of sealing-wax red, HP, 2-3 ft.

—**eriantherus, ssp. saliens.** PENS-15*. Pkt. 25c

Flat rosettes composed of a great many narrow dull green leaves and short stems, bearing very large lavender flowers, somewhat variable in shade; a fine rock plant, quite easy in the East if grown in well-drained sandy soil in full sun, HP, 1 ft.

—**fendleri.** PENS-72*. Pkt. 75c

The flowers are blue, flushed pink outside, rather narrow with widely spreading lobes; the leaves are gray-green, broad, somewhat heart-shaped. For rather dry sunny places in the rock garden or steep banks; it may be slightly tender in the N. as it comes from Texas and N. Mex., HHP, 1 ft.

—**flavescens.** PENS-16*. Pkt. 40c

A neat looking alpine appearing medium tall species, with small green leaves and small yellowish white to creamy yellow flowers in abundant clusters; a soft color, going well with the blue types, easy to grow.

—**floridus.** PENS-17*. Pkt. 25c
A tall plant with conspicuous grayish sharply toothed glaucous leaves and long showy flower spikes on stout stems. Flowers are large, inflated, rose pink, to 4 ft. tall.

—**fruticosus.** PENS-18*. Pkt. 30c
Woody shrub. Flowers blue, 2-ft. tall, June.

—**garretiae.** PENS-19*. Pkt. 50c

Rather low with several erect stems 8-16" high with a few tiny green leaves and quite large deep blue flowers on narrow spikes, very desirable for small rock garden.

—**glaber.** PENS-21*. Pkt. 35c

Procrumbent habit, fine purple blue, early and hardy, 1-ft., best in coarse soil. There is a sky-blue strain which we may be able to offer next year.

—**gloxinioides, Sensation.** PENS-62. Pkt. 30c

—**grandiflorus.** PENS-22*. Pkt. 35c

Very popular and showy; stout glaucous leaves and stems to 6 ft., carrying numerous large lavender blue flowers, fine border plant, very hardy.

—**grandiflorus, ssp. albus.** PENS-23*. Pkt. 30c

Comes about 50% true white flowers, but the white flower is all white, no lavender, a sport from the type.

—**Lavender Form.** PENS-66*. Pkt. 50c

—**heterophyllus.** PENS-77*. Pkt. 75c
A showy and very variable species from California, not reliably hardy in the Midwest and East but will survive with some protection. The plants are more or less shrubby and vary from 1-5 ft. high with narrow leaves of various colors. The moderate-sized flowers, in loose sprays, are produced over a long season and vary in color from rose-violet to intense pure blue. Best grown in full sun with very sharp drainage, in a sheltered position in the border, HP, 1-5 ft.

—**hirsutus, Improved.** PENS-24*. Pkt. 35c
An easy, eastern species, with rather large leaves and a profusion of moderate-sized flowers. The color is usually rather poor, but in this selection only good colors will appear, pink to purple, HP, 2 ft.

—**jamesii.** PENS-25*. Pkt. 50c

An alpine-appearing plant of very neat habit, the large clump of grayish leaves being attractive and the flower large, quite densely packed and numerous enough. Flowers soft color, blue-lavender.

—**laevigatus.** PENS-27*. Pkt. 50c

A very nice background plant for the border, pale lavender flowers.

—**leiophyllus.** PENS-30*. Pkt. 60c

A rare species of the glabri and confined to one mountain range, dark green foliage, to 3 ft. flowers deep pure blue, profuse bloomer and should be easy to grow.

—**lentus.** PENS-28*. Pkt. 80c

An attractive little plant of somewhat alpine appearance but with no conspicuous basal rosette; its slender stems leafy and floriferous with spikes of blue flowers, extremely rare in nature.

—**lentus, ssp. albiflorus.** PENS-29*. Pkt. \$1.00

This is a super-rarity and known only from one remote location in Utah. The flowers are white with a pink blotch.

linarioides, ssp. coloradoensis.

PENS-82°. Pkt. 50c
A tiny shrub with long narrow silvered leaves and small lavender flowers. Quite easy in the rock garden, in sun, and attractive at all seasons, HP, 6 inches.

microphyllus. PENS-31°. Pkt. 40c

A much branched shrub to 4 ft. high and across, with tiny green leaves, each branch ending in a 6" spike of bright yellow flowers about 3/4" long, may not be hardy in far N.

miser. PENS-70°. Pkt. 75c

Low growing, with tufts of dirty green leaves and short spikes of flowers very variable in size and either dusty pink or blue-purple in color. For dry sunny locations in the rock garden, HP, 6 inches.

mantanus. PENS-68°. Pkt. 75c

One of the very few very truly alpine species, growing on stone slides at high altitudes. Forms woody mats from which rise short stems with light green deeply toothed leaves and tipped with clusters of enormous clear lavender trumpets. One of the most showy dwarf species, for rock garden in full sun, likes lime, HP, 8 inches.

murrayanus. PENS-78°. Pkt. 75c

A tall species with very large and wide-open scarlet flowers. Very showy for the border, preferring sandy soil; should have some protection in very cold climates, HHP, 3-4 ft.

neomexicanus. PENS-71°. Pkt. 75c

Quite long spikes of rather bell-shaped flowers, of varying shades of blue and narrow green leaves; from the mountains of southern New Mexico where it grows in sunny meadows. Tall enough for the front of the perennial border or fine for a sunny bank, HP, 2 ft.

nitidus, ssp. polyphyllus. PENS-39°. Pkt. 30c

Bluish foliage with large close clusters of bright blue flowers, a gorgeous form of *P. nitidus*, adapted to neutral or slightly alkaline clay or gravel soil, of excellent drainage; 8 in. tall.

ovatus. PENS-73°. Pkt. 35c

One of the easiest and most popular species for the border, satisfied with almost anything except deep shade. Long spikes of good-sized flowers of rather silty blue, above handsome rosettes of large glossy dark green leaves. One of the best species for the beginner, HP, 2-3 ft.

pachyphyllus, ssp. congestus. PENS-32°. Pkt. 40c

Attractive species, a little too tall for the rockery with pleasing light green foliage and showy floriferous spikes of bright blue flowers making a fine contrast with its glaucous foliage, to 2 ft.

palmerii. PENS-33°. Pkt. 50c

The large sharply toothed leaves are conspicuous from a distance; the flowers are among the largest in the genus and always plentiful; a very showy plant and much praised. Flowers are similar in shape to those of the Catalpa, an inch or more across, broad and flaring, whitish, flushed more or less with pink and some a rich deep pink.

palmerii, White Form. PENS-34°. Pkt. 40c

A pretty white form of the species with a pink flush at base and purple guide lines.

palmerii, ssp. eglandulosus. PENS-35°. Pkt. 40c

Plants much broader with many stems which are thinner than those of the type and with smaller capsules.

pinifolius. PENS-81°. Pkt. 75c

A newly introduced species that has long been coveted by ardent rock gardeners. From the woody base arise short stems set with very short and narrow light green leaves, above which are narrow trumpets, scarlet with yellow throat, and with long reflexed lower lip. From mountains near Mexican border, but perfectly hardy and easy in the East. Will tolerate light shade and likes some sand in the soil; a great treasure in a sunny rock garden, HP, 6-9 inches.

platyphyllus. PENS-36°. Pkt. 75c

Sub-shrubby, a very attractive, alpine appearing showy little plant with a mat of little leaves at base and numerous erect stems about 12" high, each with a well packed prominent spike of blue flowers; desirable in every way for the small or medium rock garden.

procerus. PENS-37°. Pkt. 25c

Native Montana species, blue flowers, 10-18 inches tall, June-July.

pseudospectabilis, ssp. connatifolius. PENS-38°. Pkt. 50c

Thin bright green leaves, finely toothed, corolla pink to rose and rather narrow, quite showy.

rubicundus. PENS-40°. Pkt. 60c

A very attractive species with unusual lovely color of rose with a touch of blue, showy for the wild garden or for the border, stands some shade. Not a common species, 4 ft.

secundiflorus. PENS-42°. Pkt. 30c

Very showy graceful plant of medium height making a clump of small bluish green leaves, several wavy stems, leafy on lower half and numerous large lavender flowers; desirable for either rock garden or border.

secundiflorus, ssp. lavendulus. PENS-43°. Pkt. 25c

Has glaucous blue leaves and blue flowers, otherwise like the type.

sepalulius. PENS-44°. Pkt. 50c

Much branched sub-shrub to 3 ft. with quite large and inflated violet flowers; very showy.

speciosus. PENS-45°. Pkt. 50c

Very showy member of the Glabri with unusually large blue flowers on stems 1-2 ft. not too tall for the small rock garden, or too low for the front of the border, extremely desirable in every way.

strictus. PENS-46°. Pkt. 25c

Very showy species with narrow leaves, stems bearing densely packed spikes of deep blue flowers, slender but strong stems, delicate looking but heavily flowered, 1 1/2-2 ft., for border or large rock garden.

subglaber. PENS-47°. Pkt. 50c

Quite similar to *P. glaber*, very showy, very floriferous, large deep blue flowers packed on quite long spikes; very lovely and ornamental species.

triflorus, ssp. integrifolius. PENS-48°. Pkt. 30c

Tall herbaceous species with one to several stout stems, with large spear-shaped leaves, dark green, very large bright rose-purple, broadly bell-shaped flowers in dense spike-like panicles. This should grow readily in cultivation and will be a favorite in gardens. This is a rather rare species as yet. Highly recom-

triflorus. PENS-58. Pkt. 25c

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Rather low growing, with stems semi-prostrate; rather small toothed leaves. Flowers are rather short, but quite broad and rich blue-purple; not one of the showiest species but very attractive in the rock garden, HP, to 1 ft.

unilateralis. PENS-50°. Pkt. 25c

Tall, lavender flowers more or less distinct veining in throat; not difficult to grow and very pretty in the garden. A favorite.

utahensis. PENS-69°. Pkt. 75c

1-inch-long rather narrow tubes of cherry-red above loose rosettes of rather narrow blue-gray leaves; out of flower, the plant looks much like *P. angustifolius*. For stony sunny slopes; may need slight protection in cold winters. This is the true species, the name often appears in catalogs, misapplied to dull and undesirable species, HP, 1-2 ft.

watsoni. PENS-74°. Pkt. 75c

Makes a fair-sized tuft of many thin and graceful stems, with a profusion of small flowers of light to deep blue. An easy species for the rock garden in sun or light shade and will thrive under poplar trees, HP, 1 ft.

whippleanus. PENS-51°. Pkt. 50c

The flowers in our particular offering are hooded and of sombre black-purple or sometimes greenish-yellow; the leaves small, dark green and in prominent rosettes; small dark green leaves; medium height and very floriferous. The species is quite variable in color and some may be disappointing.

wilcoxii. PENS-52°. Pkt. 30c

Open panicles to 2 ft., clear blue, medium sized flowers. Likes drainage as do most Penstemons and given this they will grow on fairly moist slope in sun or part shade.

Fairly large growing but desirable, best in shady, wild garden, flowers blue, 1-3 ft., May-June.

Saier's Blend of Species. PENS-53°. Pkt. 35c

This is a mixture of every species and sub-species we have in stock and including many unlisted ones, that we do not have enough of to offer separately. This is a rare and valuable collection of Penstemons. They should, of course, be grown in a nursery row until you can tell just what they are.

Small Flowered Varieties Mixed. PENS-54. Pkt. 35c**PERILLA (pe-RIL-ah)**

Half hardy annuals valued for their highly colored foliage and used in summer bedding and sub-tropical effects; thrive in any light loamy soil; start seeds in March indoors in gentle heat, harden off and set out late in May; native of India and China.

frutescens crispata. PERI-1. Pkt. 15c

Easily grown annual especially valued for the rich color effect of its foliage, deep maroon with bronze metallic sheen, the margins curled, crisped and undulated; used much as one would Celcius but it is much quicker in growth and easier grown; sow seeds in position or start indoors, 4 ft.

namkinensis. PERI-2. Pkt. 15c

Half hardy annual, deep purple foliage, very popular bedding plant.

lacinata. PERI-3. Pkt. 15c

Pretty laciniated foliage giving it an effective appearance.

PETUNIA

There is hardly any other flower that will give so much bloom with as little care as will the Petunias; in the hot summers, their bloom is continuous. Their use is confined to porch boxes and baskets or for bedding. They do not do well in shade.

The chief pitfall the amateur runs up against in growing Petunias is in the seed sowing; almost invariably they bury the tiny seeds too deeply so that the sprouting seedlings cannot possibly fight their way to the surface. First the soil should be a good loamy texture with fine leaf mold mixture for the top. Flower pots, a shallow type of fern pot make an ideal seed sowing place; some drainage material in the bottom and fill to the top with the above soil then press down and level off, carefully sow seeds on top of this soil, using a little soil with the seeds so as to get a better distribution of the seeds, then give a fine sprinkling of sand over the seed, not over 1/16 inch at most, pressing this down firmly but carefully so that the seed will come in contact with the soil particles. This work should really be done a day before planting the seed, when the soil can be well watered and the pot soaked with water, letting this stand over night, before sowing the seed. Then, after the seed is planted, place a pane of glass over the pot to prevent the loss of moisture, but watch carefully for too much condensation of water on the glass, which should be removed daily and the seed bed given ventilation. The pot should be in a place with about a 60 degree night temperature and exposed to the light; germination shows in about 10 days, when the seedlings should have light and ventilation; if the soil was properly watered at the beginning it usually is not necessary to rewater during the germination period. In too dry a place it will be best to protect the flower pot from too much drying out. When seedlings show 3-4 leaves, transplant to a flat containing good soil with plenty of humus worked into it and for still better plants, it is well to transplant them again after they get a good root system started, placing them into 2-3 inch pots. Petunias require plenty of sunshine. Set outdoors when it is warm and no danger of frost.

Double Giants of California. PET-1. Pkt. 50c

An improved Shepherd Strain with immense blooms typical of this strain, magnificent color range and high double percentage.

Ruffled Monsters, Giants of California. PET-2. Pkt. 50c

Light and dark shades make up this high class blend, deeply ruffled and artistically veined, flowers 5"-7" across and almost look as if double.

Dwarf Giants of California, Rosie. PET-3. Pkt. 35c

Rich rose, shading deeper in throat, very compact and large flowered, a perfect florist variety for pots and boxes.

Dwarf Giants of California, Deep Rose PET-4. Pkt. 35c

A very pretty deep rose shade with mammoth flowers, ruffled and beautifully pencilled.

Dwarf Giants of Calif., Ramona Strain PET-5. Pkt. 35c

Habit is dwarf and compact; colors are hand blended; flowers ruffled and fringed, and suitable for the most critical.

Giants of Calif., Salmon Rose Shades. PET-6. Pkt. 50c

This is a special mixture for the Florist trade and contains only the choicest salmon-rose colored plants; its blooms are exceptionally large, averaging 5-6 inches, with shallow open throats; flowers freely produced on sturdy plants and all have beautiful veined markings on their open throats.

Giants of California, Mixed. PET-9. Pkt. 35c; 1/32 oz. \$3.50

Well balanced blend of light and dark shades, fringed and ruffled, with attractive deep throats, many beautiful veined; the first picking from the choicest plants. For bedding or boxes.

gr. fl. Fluffy Ruffles. PET-8. Pkt. 35c; 1/32 oz. \$2.25

A delightful blend, containing numerous shades of veined and bicolor pink and rose combinations not found in the separate color varieties; all flowers are finely fringed and so heavily ruffled that they appear double; by far the finest choice Petunia for the home garden and a prime favorite with the florist.

Giants of California, Florist Strain. PET-7. Pkt. 50c; 1/32 oz. \$4.00

Supreme Florist Strain in extremely large flowers, in shades of rose, pink, salmon, copper and other delightful soft pastel tints.

Giants of California, Bas' Mixed. PET-10. Pkt. 35c; 1/32 oz. \$3.50

A blend of the largest and choicest colors especially for the Florist trade; hand blended from the best varieties by one of our largest Petunia growers.

gr. 1. Single Mixed. PET-11. Pkt. 25c; 1/32 oz. \$1.10

The large flowering type with plain edges, 12" tall, and making the most attractive showing in beds, boxes or baskets. The blend is the very best.

HYBRID NANA COMPACTA VARIETIES:

These grow 12" tall, the plants are compact and upright and make the best plants for beds where a uniform shape is wanted with an abundance of flowers the whole summer and fall.

Blue Violet. PET-12. Pkt. 20c; 1/4 oz. 50c

A shade deeper than Periwinkle and several tones lighter than Violaacea, the most beautiful dark violet.

Celestial Rose, Reselected. PET-13. Pkt. 25c; 1/4 oz. 70c

Deep rose, very compact, in an improved habit and much larger flowers.

Glow. PET-14. Pkt. 25c; 1/4 oz. 75c

A beautiful bright carmine-red.

Rose of Heaven, Improved. PET-15. Pkt. 20c; 1/4 oz. 70c

Reselected live rose-pink with compact habit, greatly improved form.

Snow White. PET-16. Pkt. 20c; 1/4 oz. 50c

Pure white, the best white in this classification.

Topaz Queen. PET-17. Pkt. 30c; 1/4 oz. 70c

These are dwarf plants about 8" tall, with an especially large flower; they are especially fine for plants, boxes and baskets.

Velvet Ball. PET-18. Pkt. 50c; 1/32 oz. \$2.00

Round, compact ball-shaped 8" plants, freely producing 2 1/2" velvety blood red flowers, excellent new type.

King Henry. PET-19. Pkt. 50c; 1/32 oz. \$2.00

HYBRIDA TYPE: These grow 18" tall, rather spreading plants that can be used anywhere; the flowers are not so large but they are extra floriferous, and are hard to equal for the ordinary flower bed.

De Luxe Bedding Blend. PET-20. Pkt. 20c; 1/4 oz. 50c

A beautiful blend of the most desirable varieties and in the very best color range.

Formula Blend. PET-21. Pkt. 20c; 1/4 oz. 50c

This blend contains every known color in the Hybrid group, in a wonderful blend which has taken years of experience to perfect. This is the outstanding blend of one of the better Petunia growers in the country.

MINIATURE TYPE: 6" plants with good sized plain bright flowers, each plant compact and upright and making the most beautiful effect in edgings.**Bright Eyes. PET-22. Pkt. 25c; 1/32 oz. 50c**

A soft pink color with white throat, giving the plants a "bright eyes" effect. Very pretty as an edging plant.

Best Mixed. PET-23. Pkt. 25c; 1/32 oz. 50c

A hand blend of 7 exquisite varieties. Very fine. These would make a grand display for a bare place in the rockery, as well as an edging.

Little Giants. PET-24. Pkt. 50c; 1/32 oz. \$1.40

A new type Petunia, 8-12" tall, plants remain so neatly compact and erect all season it is sure to become most popular for bedding and pot plants. Medium sized, well ruffled and waved, deep throated flowers continue to keep the plants completely covered. The unusually attractive color range from deep crimson to white in almost every imaginable shade and combination of marking; it has a pleasing balance of light and dark shades.

These are 100,000 to 200,000 Petunia seed in an ounce of seed.

PHACELIA (fa-SEE-li-ah)

Hardy annuals, mostly lavender, violet or blue flowers in clusters or in racemes, charming in mass plantings; sow where plants are to grow or they can be started indoors for early bloom.

campanularia. PHAC-1. Pkt. 10c

Large brilliant deep blue flowers, very beautiful, useful for edging or rock garden, delighting in a dry soil and sunny situation, 8".

leucophylla. PHAC-2. Pkt. 20c

PHLOGACANTHUS (flo-ga-CAN-thus)

Somewhat shrubby plants with spikes of attractive flowers, related to Acanthus. They are best grown in the greenhouse, requiring a rather warm, damp atmosphere and soil rich in humus. The flowers are tubular, two-lipped, rather long and broad.

thyrsiflorus. PHAL-1. Pkt. 30c

A moderate-sized shrub, with narrow

leaves and long woolly spikes of tubular orange flowers. Can be grown outside in Florida.

PHLOMIS (FLOH-mis)

Perennial plants belonging to Mint Family, suitable for the wild garden or shrubby border. Easily grown from seeds.

Purple Mixed. PHLO-1. Pkt. 15c

Showy long-lived perennials of easiest culture, 4 ft., vivid purple flowers in whorl above whorl, good.

PHLOX

A genus with mostly perennials and consisting of a varied list of plants; all are easily grown. The perennial sorts do well in a rather heavy soil, but all thrive in any good garden soil. While the best known are the tall perennials, they come in other types, creeping species that are suited for rock work.

paniculata, New Hybrids, Mixed. PHLX-1. Pkt. 15c

Often listed as *P. decussata*. Common name Summer Phlox. Contrasts brilliant colors in large flowered plants, strictly first class selections; perennial and will afford an interesting collection of new colors and combinations.

grandiflora. PHLX-5. Pkt. 20c

Easily grown summer annuals preferring sunny situations, light rich loam; if faded blooms are removed will flower again in the fall; excellent for borders, beds and cutting. This is an extra large flowered strain, florets 1 1/4"-1 1/2" across, blooming freely in massive trusses. This strain has taken all the prizes, 1 ft.

Art Shades. PHLX-3. Pkt. 20c

Soft pastel colors and delicate shades in mammoth trusses of large flowers, 1 ft.

Cecily. PHLX-4. Pkt. 20c

This is the finest large flowered dwarf Phlox in existence, forming round compact bushes about 6-8 in. tall which are covered with its large flowers. These very beautifully, most being centered white or dark or striped; its regular and uniform growth in all colors, grand display of shades and the large size of the flowers, makes the Cecily Phlox far above all other dwarf sorts.

PHORMIUM (FOR-me-um)

New Zealand Flax. Magnificent plants for subtropical effects, somewhat suggesting Yucca in habit. The basal rootstock produces a great number of very long and narrow sword-like leaves, which may be more than 8 ft. in length. The flowers, up to 2-in. long are produced in a panicle at the top of a tall stem and may be either red or yellow. Seeds germinate very readily, the seedling grow rapidly. Plenty of moisture is required to produce fine specimens. A pot plant in the N. although it is reported to have survived short periods of as low as 10 degrees F.

tenax. PHOR-1. Pkt. 40c

The larger of the two species with leaves as much as 9 1/2 ft. long and 2 inches wide, dark green with bright red margins and keel. The flower scape is from 5-15 ft. high with tubular flowers of dull red or pure yellow, HHP, 5-15 ft.

coquium. PHOR-2. Pkt. 40c

A plant half the size of *P. tenax*, with pale green leaves and slightly smaller yellow flowers, HHP, 3-7 ft.

PHOTINIA (loh-TIN-i-ah)

Asiatic and deciduous evergreen shrubs and trees of Rose Family. The deciduous kinds are hardy in the North, the evergreens hardy only up to Georgia; they do best in a light sandy loam and sunny position; easily grown from seed.

integrifolia. PHOT-1. Pkt. 25c**PHYSALIS (FIS-a-lis)**

The Ground Cherry, whose tomato-like fruit is enclosed in a balloon-like calyx. They are easily grown, but may be started indoors like tomatoes so that they will fruit earlier. The Chinese Lantern Plant is frequently grown for its brilliant orange "balloons" which are prized for winter bouquets.

minima. PSAL-1. Pkt. 30c

Shrubs of trees with finely cut ferny foliage, and heads or long sprays of rather small yellow flowers with a mass of golden stamens. They are hardy in the South, but in the North must be grown in a cool greenhouse, although they have been known to withstand temperatures of 20". They need no special soil or culture. Hot water should be poured over the seeds, which must soak about 48 hours before sowing.

PIERIS (py-ER-is)

Evergreen shrubs and small trees native of N. Am. and Asia, of Heath Family. They grow best in sheltered positions and some are grown in the greenhouse; moist sandy loam with peat or leaf mold best. Easily grown from seed.

formosa. PIER-1. Pkt. 25c**ovalifolia. PIER-2. Pkt. 25c**

PLATYCODON (plat-i-KOH-don)

grandiflorum, Mixed. PLTY-1. Pkt. 15c
A popular perennial of the Bluebell Family with showy white and blue flowers known as Balloon Flower. Flowers borne at end of slender leafy stems are bell or star-shaped; very useful in the rock garden or border and considered by many gardeners as the most beautiful hardy plant in cultivation; thrives in deep well drained sandy loam soil,

NUDICAULE:

(Iceland Poppy.) A perennial, to 1 ft., blooming the first year from seed and rarely lasting more than 3 years. Its flowers are very beautiful and comes in a number of charming varieties, April to June.

—**Amurensis, Yellow.** POPY-2. Pkt. 15c (Yellow Wonder.) Sensational new Poppy with showy Buttercup yellow flowers on 2 ft. stems, easy, established plants often start blooming in March.

—**Coonara Pink.** POPY-3. Pkt. 15c Gorgeous rose tints of varying intensity, a true strain; soft pink to deep rose, apricot, salmon, etc., 1½ ft.

—**El Monte.** POPY-4. Pkt. 15c A new, beautiful deep tangerine-orange large fringed flower.

—**Imperial Jewels.** POPY-5. Pkt. 15c ½ oz. \$1.25

A new superb strong stemmed flower in an extra large color range, a gorgeous display.

—**Gartford Giant Hybrids.** POPY-19. Pkt. 10c; ¼ oz. 50c

Giant crinkly petalled flowers on long stems, ideal cut flowers if picked in bud; beautiful colors in white, orange and reds, picotee-edged, 2½-3 ft.

—**Keimscott Strain.** POPY-22. Pkt. 20c; ½ oz. 50c

The flowers of our new Keimscott Strain are larger than we have ever seen before on any variety of Iceland Poppy, often measuring 3" across. Although the petals are of heavier texture they have the same delicate waxy appearance; the stems are longer and so much more stiffer they tend

POTENTILLA

(poh-ten-TIL-ah)

Perennials suitable for beds and borders, with some excellent rock garden plants; thrive in sunny locations in any good garden soil but prefer sandy soils, blooming from July to September.

—**climacis.** POTL-10. Pkt. 25c

—**fulgens.** POTL-9. Pkt. 25c

A silver-leaved trailer, with beautiful salmon-rose flowers, for the border or large rock garden, HP, 1¼ ft.

—**gibsonii, Scarlet.** POTL-1. Pkt. 20c

Flowers June-October; 1 ft.

—**Nepalensis, Miss Willmott.** POTL-5. Pkt. 20c

Bright carmine, best of species.

—**White Beauty.** POTL-6. Pkt. 20c

Fountains of snowy blossoms, foliage in autumn turns to bronze maroon, 1½ ft.

—**fruticosa.** POTL-8. Pkt. 50c

One of the best shrubs for the rock garden bearing tiny rose-like flowers all summer; yellow or rarely pure white. A variable plant in stature and habit of growth, ranging from prostrate forms to 3 ft. bushes. Easy from seed. It may be also used as a low hedge; not at all fussy about soil or exposure.

—**argyrophylla.** POTL-11. Pkt. 25c

—**nepalensis Hybrids.** POTL-2. Pkt. 20c

Rose to rosy crimson color hybrids.

—**Warreni.** POTL-3. Pkt. 15c

Large flowers in massed golden color, very good; 18 inches.

—**Potentilla Blend.** POTL-7X. Pkt. 15c

Contains many kinds.

PRIMULA (PRIM-you-la)

Primroses. A very large genus, mostly low growing and flower parts always in 5's. They are exceedingly useful plants and adapted to various uses. We will attempt to divide the offerings into classes to make selections easier. They require a deep moist soil, coolness with some shade, sow seed late in fall or very early in spring. Greenhouse species follow special cultural requirements.

—**denticulata.** PRIM-2. Pkt. 25c

Dense heads of pale blue-purple flowers. Hardy alpine species used in rock garden.

—**calderiana.** PRIM-16. Pkt. 90c

(Often incorrectly called "P. roylei.") A member of the group containing P. edgeworthii and P. scapigera, which are currently causing a sensation in Primula circles. Flowers 1 in. across, royal purple or rich maroon, darker in the center, with yellow eye, borne in many-flowered umbels on short stems. Grown in sheltered north facing crevice or in a pot, in soil rich in humus with some winter protection from sudden changes in temperature; very rare in cultivation.

—**elwesiana.** PRIM-17. Pkt. 50c

A very rare and unusual species, often placed in the related genus Omphalogramma, as its flower parts are in sixes instead of fives; the flowers are rather bell-shaped, with long fringed lobes of rich purple; does best in cool moist climates, seed is slow germinating, HP, 1 ft.

—**kewensis.** PRIM-3. Pkt. 30c

Golden yellow fragrant flowers, usually grown under glass, a well known hybrid.

—**kingii.** PRIM-19. Pkt. 50c

Bells of rich purple or blood crimson, over small leathery oval leaves; a most beautiful species but quite difficult; best grown in light shade in cold frame or alpine house.

—**malacoides, Mixed.** PRIM-4. Pkt. 35c

Fairy Primroses, a delicate looking plant popular as a winter greenhouse plant. Seeds sown in March will produce plants in late fall.

—**obconica, Mixed.** PRIM-5. Pkt. 50c

It makes a very popular winter house plant for greenhouse growing. This strain has gigantea-type flowers and is in the best colors.

—**gr. fl. Mixed.** PRIM-6. Pkt. 40c

A bright blend of one of the prominent European growers, large flowers.

—**obliqua.** PRIM-18. Pkt. 50c

A very beautiful species of the Nigella group with large pendulous flowers varying from white to deep yellow and rarely to flesh or pink. It needs rich soil in very light shade and should, if possible, be planted where it is buried in snow all winter, otherwise it should be carefully covered with rock wool while dormant.

PORTULACA

(POHR-tew-lak-ka)

Usually treated as a hardy annual in the North although they are perennials. They are especially pretty in beds, borders, edging or in the rock garden, requiring full sun and average garden soil on the loamy side; they stand dry situations. Seed should be sown direct to the garden, mixing some soil with the seed and then pressing the surface of the bed so as to make a contact between the seed and the soil, sow in April. Plants are low growing and the flowers are very beautiful, 2-3 in. tall.

—**grandiflora, Double Mixed.** PORT-1. Pkt. 20c

Extra select, the flowers look like little roses, in pink, lavender, yellow, orange and red shades, very showy, 4 in. tall.

—**Single Jewels.** PORT-2. Pkt. 20c

A very free flowering dazzling crimson selection, about four times larger than ordinary single varieties.

—**Single Mixed.** PORT-3. Pkt. 10c; ½ oz. 30c

Bright glistening flowers in all the colors of Portulaca; they are especially pretty with their wide open flowers.

—**All Mixed.** PORT-4X. Pkt. 15c

A hand made blend of all.

—**sapphirina.** PRIM-22. Pkt. 50c

A tiny species, with small leaves and short stems bearing one to four rather small flowers of brilliant deep blue. Not one of the easiest species, requiring cool rich gritty soil and ample moisture during the growing season. HP. 2-in.

—**sikkimensis.** PRIM-21. Pkt. 50c

An easily grown species with long-petioled basal leaves and foot-high naked stems from which dangle a cluster of drooping yellow flowers. Seed germinates readily, and the plants will grow in sun if given plenty of moisture. HP. 1 ft.

—**sinensis fimbriata Mixed.** PRIM-7. Pkt. 50c

Chinese Primroses. Popular greenhouse flowering plants blooming in late autumn from March sown seed. They are much like P. malacoides in appearance. This strain has fimbriated petals. Extra choice.

—**fimbriata Mixed.** PRIM-8. Pkt. 35c

Giant sized flowers, fringed petals.

—**Giants.** PRIM-9. Pkt. 50c

Made up only from the giant flowering varieties, very extra.

—**Fringed.** PRIM-10. Pkt. 50c

A Holland strain of the best fringed varieties.

—**veris elator.** PRIM-11. Pkt. 25c

Oxlip. Pretty little Wild Primrose of N. Europe, 5 in. tall with nodding yellow flowers.

—**White Swan.** PRIM-12. Pkt. 35c

A pretty white flowered variety.

—**Hybrids.** PRIM-13. Pkt. 35c

Extra choice strain of this hardy species.

PROBOSCIDEA

(proi-bo-SID-ee-ah)

Proboscis Flower, Unicorn Plant. Annual and perennial with large, long stemmed leaves, large purple flowers and okra-like fruits.

—**jussieui.** PROB-1. Pkt. 15c

Listed incorrectly as Martynia. Native from corn belt southward and grown both for ornament and for its fruits, which when soft and immature are pickled, either alone or with other vegetables. In the North start indoors under glass and set out after danger of frost is passed. Set out like cucumbers.

PRUNELLA (proo-NEL-ah)

Brunella. Small perennial plants of Mint Family, with purple or violet flowers in close-set heads or spikes. Used in shady part of border and rock garden. Are easily naturalized in the wild garden.

—**gr. fl. rosea.** PRUN-1. Pkt. 20c

Many spikes of rose colored flowers rise from flat foliage mats, excellent rock garden or edging plant, 1 ft.

PRUNUS (PROO-nus)

A genus of stone fruits, many valuable orchard fruits. Many are very hardy in the North and they have very showy flowers.

—**acuminata.** PNUS-1. Pkt. 25c

—**nepalensis.** PNUS-2. Pkt. 25c

QUAMOCLIT (KWAM-oh-klit)

Annual and perennial twining vines belonging to the Morning Glory Family, often called Star Glory; treat as tender annuals; easily grown from seed; used as summer flowering vines of light and rapid growth, thriving in rather light soils and in sun.

—**lobata.** QUAM-1. Pkt. 20c

Robust perennial with 3-lobed heart-shaped leaves and crimson flowers fading to pale yellow.

—**pinnata.** QUAM-2. Pkt. 20c

Cypress Vine. Slender annual twiner to 20 ft. with leaves divided into fine thread-like segments and showy scarlet flowers. Easily grown; blooms mid-summer till frost.

—**sloteri.** QUAM-3. Pkt. 20c

Cardinal Climber. A hybrid between Q. coccinea and Q. pinnata. Palmately-lobed leaves and cardinal red flowers with white throats. Grows 30 ft. blooms from mid-summer till frost.

—**Mixed.** QUAM-4. Pkt. 15c

QUEEN ANN'S LACE

—**Daucus carota.** QANL-1. Pkt. 10c; oz. 65c

An annual cut flower, 2-2½ ft. tall, with finely cut foliage and filmy white flowers in umbels. It makes a very good cut flower for a filler, is easily grown. Do not allow it to go to seed as it can become a weed.

RANUNCULUS

(rah-NUN-keu-lus)

A large genus widely distributed and known under the names of Buttercup and Crowfoot. The Buttercups are perennial and easily grown from seed; the Crowfoots have yellow flowers and both do well in well-drained soil and sunny positions. Most of the species are perennial. Many of the Crowfoots make fine rock garden plants.

—**ASIATICUS:** (Turban or Persian Buttercup.) It is grown in the greenhouse or outdoors during summer and not considered hardy. It has tuberous roots which should be taken up and stored over winter. It must be grown cool and likes a moist atmosphere.

—**hirtellus.** RUN-4. Pkt. 50c

A very variable Asiatic species and in its best forms, with 2 inch flowers of yellow, white or pale rose, on short stems; perennial and a plant well worth gambling on.

—**lindleyi.** RUN-5. Pkt. 25c

—**superbus.** RUN-3. Pkt. 25c

Beautiful spring flowers in shades of pink, white, red, yellow and rose; sow seeds in flower pot, covered with glass as germination requires 30-40 days, perennial.

RHODANTE

—**manglei.** RHOD-2. Pkt. 10c

Rose, everlasting, hardy annual.

RHODODENDRON

(roh-doh-DEN-dron)

They are easy to grow if given a few more special attention to their requirements. They all prefer acid soils, most of them do best in partial shade and the evergreen sorts need wind protection. All dislike hot sunshine. Their gorgeous flowers and magnificent foliage well repay those who give them the attention necessary. About all are at home on the Pacific coast, they also can be grown in the South but in the North only the hardy species should be attempted. They all require an acid soil between pH 4.5 and pH 5.2, containing much fibrous material; the roots grow near the surface and thus should be provided with moisture but not a soggy soil.

—**aeruginosum.** RODN-1. Pkt. 75c

A compact head of about 10 flowers 1½ in. long, lilac rose to reddish purple, spotted with deeper color, 6-8 ft. (Campanulatum Series).

—**anthopogon.** ROHN-3. Pkt. 75c

An alpine species with fair-sized pink flowers resembling Daphne in appearance, 2 ft. It is said that this species cannot endure clay soil and it needs an open northerly exposure. (Anthopogon Series).

—**arboresum.** RODN-2. Pkt. 75c

A glorious tender tree-like species, for mild climates only. The flowers are up to 2 inches across, deep scarlet with deeper dots and in huge clusters. Grows as much as 40 ft. (Arboresum Series).

—**barbatum.** ROHN-4. Pkt. 75c

Another rather tender tree-30-60 ft. high with somewhat smaller flowers of deep crimson or blood red, in dense trusses. (Barbatum Series).

—**camelliaeflorum.** ROHN-5. Pkt. 75c

Sometimes epiphytic, rather tender, with flowers inch-wide, white tinged pink and borne singly. For greenhouse culture in the North, 2-6 ft. (Camelliaeflorum Series).

—**campanulatum.** RHON-6. Pkt. 75c

Loose trusses of flowers 1½ inch long, ranging in color from white to shades of purple; a very early bloomer, shrub 12-18 ft. tall. (Campanulatum Series).

—**campbelliae.** ROHN-20. Pkt. 75c

—**campylocarpum.** RHON-7. Pkt. 75c

Perhaps the finest yellow-flowered species, a moderate-sized rounded bush, 4-8 ft. tall. Has loose trusses of flowers 1½ in. long and 2 in. across, clear canary-yellow or pale yellow, sometimes with a faint crimson blotch at the base. (Thompsonii Series).

—**ciliatum.** RHON-8. Pkt. 75c

A tender species for greenhouse or very mild climates, with 2 in. flowers either white or tinged rose; extremely free flowering and handsome; 3 ft. tall. (Maddenii Series).

—**cinnabarinum.** RHON-9. Pkt. 75c

A magnificent species with rather tubular flowers up to 2 in. long, of cinnabar or brick-red, free flowering. Well worth trying, especially south of New York, 6 ft. (Cinnabarinum Series).

—**dalhouisae.** RHON-10. Pkt. 75c

An epiphyte with fragrant flowers, 3½ in. long, white tinged externally with rose; lemon scented. For cool greenhouse, and one of the finest of all species. (Maddenii Series).

—**eleagnoides.** RHON-11. Pkt. 75c

A very small alpine shrub with solitary bright yellow or reddish purple flowers about 1 in. across. For slightly shaded positions in the rock garden. (Lepidotum Series).

—**falconeri.** RHON-21. Pkt. 75c

—**fulgens.** RHON-12. Pkt. 75c

Large bright scarlet flowers on a medium sized shrub and very early flowering; from high altitudes and fairly hardy. (Campanulatum Series).

—**glacum.** RHON-13. Pkt. 75c

A dwarf shrub with inch-long flowers of pale old rose; very aromatic foliage. A good one for the front of the border. (Glacum Series).

—**grande.** RHON-14. Pkt. 75c

A magnificent small tree with enormous leaves and big flowers of white or cream with purple blotches, in big clusters, pink in bud. Hardy on the West Coast. (Grande Series).

—**Griffithianum.** RHON-22. Pkt. 75c

—**hodgsonii.** RHON-15. Pkt. 75c

A tall shrub with rather small flowers that open dark magenta-purple and fade to a dull lilac. The shiny green foliage is particularly handsome; rather tender. (Falconeri Series).

—**lanatum.** RHON-16. Pkt. 75c

A bush or small tree with good sized flowers of pale yellow with crimson spots; one of the more fussy species but attractive when well grown. (Campanulatum Series).

—**Maddenii.** RHON-23. Pkt. 75c

—**thompsonii.** RHON-17. Pkt. 75c

One of the finest of all, 2 inch flowers of deep blood red, fleshy and waxy, extremely free blooming. A tall bush, with rounded bluish-green leaves. Unfortunately attempts to grow it outside in the East have not been successful. (Thompsonii Series).

—**var. candelabrum.** RHON-18. Pkt. 75c

A variety with paler colored flowers.

—**wightii.** RHON-19. Pkt. 75c

A small tree with large rounded umbels of pale yellow flowers, spotted with crimson. Very attractive and early flowering; this has not been tried in the East to our knowledge. (Lacteam Series).

RHEUM (REE-um)

A strong and vigorous growing Asiatic genus of perennials of which the Rhubarb is the most popular, here. Other species are used for bold effect in the border.

—**mobile.** RHEM-1. Pkt. 40c

The stem is densely covered with overlapping downward pointing bracts, which are strikingly effective; a fine plant for bold foliage effect; should be mulched well in winter, HP, 4 ft.

—**acuminatum.** RHEM-2. Pkt. 50c

A relatively dwarf species with stems and flowers a deep red-purple; most effective against background of foliage, HP, 2-3 ft.

RICINUS (RIS-i-nus)

Castor Oil Bean. Tender annuals grown for their tropical foliage effect as centers to large beds; start seeds indoors in small pots for early plants, soil should be rich and well drained. The seed is recommended for ridding gardens of moles, placing the seed in the runways; the seeds are poisonous—do not let children play with them.

—**borboniensis arboreus.** RIC-1. Pkt. 10c; oz. 25c

One of largest types, red stems and red leaves with a flower to 10-in.

—**cambodensis.** RIC-2. Pkt. 10c;

oz. 25c; ¼ lb. 60c

Dark foliage, blackish purple stems.

—**Major.** RIC-4. Pkt. 10c;

oz. 25c; ¼ lb. 60c

(Communis). Tall true Castor Oil Plant. Leaves large, sometimes 3-ft. across.

—**sambariensis.** RIC-6. Pkt. 10c;

oz. 25c; ¼ lb. 60c

—**viridis.** RIC-7. Pkt. 10c;

oz. 25c; ¼ lb. 60c

Green foliage, 10-12-ft.

—**Mixed.** RIC-8X. Pkt. 10c;

oz. 25c; ¼ lb. 55c

ROSE

We list here those species of the genus Rosa that are shrub-like and that can be grown from seed. The seed, as a rule, should be planted outdoors in late autumn or early spring, best in a frame, for protection.

—**polyantha nana.** ROSE-1. Pkt. 20c

This is a selection with flowers in white, blush or pink and rose, the flowers are tiny and cover the bush. Easily grown from seed, and many even form flowers the first year. Fine for rock garden, edging or pot plant, perennial.

RUBUS (ROO-bus)

Brambles. Native shrubby plants of the colder regions, belonging to the Rose Family. Some are especially good fruits and a few grown as ornamentals.

—**moluccanus.** RUBS-1. Pkt. 20c

SAXIFRAGA

(sak-SIF-rah-gah)

Rock-plant. Mostly hardy perennials, rarely annual, native of temperate and arctic regions; flowers mainly yellow or white and the leaves usually in rosettes at base of plant. All are beautiful and interesting subjects for rock gardens or walls, the plant being as ornamental as the flowers. Combined with *Semprevivum* and *Sedums*, they can make a rock garden. Seed can be started in late summer, protected during winter and the plants set out in the spring.

—winter or early spring sowing is best.

—*arguta*. **SAX-1. Pkt. 25c**
Stream side, native western species, best in wet places, white flowers, 8-10-in. tall, flowering July-Aug.

—*diversifolia*. **SAX-4. Pkt. 35c**
Forms large clumps of leathery egg-shaped leaves with leafy stems bearing a number of golden stars 1/2-3/4 inch across. Likes marshy places or will grow in a shaded foundation planting if not too dry; root too large for the rock garden, HP, 8-13 inches.

—*ligulata*. **SAX-2. Pkt. 25c**
Pale red flowers, very ornamental, from Himalayas.

—*purpurascens*. **SAX-3. Pkt. 35c**
A very handsome species of the *Mejasea* type, with large glossy leaves, clump-forming, and nodding purple bells; foliage turns red in autumn. For the shady border or edges of the rock garden, easy and vigorous, HP, 9 inches.

SCABIOSA (skay-bi-OH-sah)

Mourning Bride or Pin Cushion Flower. Easily grown in an open sunny situations, seeds being either started indoors or planted direct to garden; pinching back the annual forms will produce nice bushy plants; keep flowers cut and they will bloom all summer, excellent cut flowers. As the annual forms flower best in the early part of the season, start seed early for the best bloom, in milder sections sow in the fall.

—*caucasica*, House Hybrids. **SCAB-1. Pkt. 25c**
Green and bronze foliage, 10-12-in. Many beautiful varieties mixed.

These improved giant hybrids are exquisite in the garden and an excellent cut flower, one of the loveliest perennials. Colors light and dark blue, and various mauves and lilac shades.

—*columbaria*, Lavender. **SCAB-2. Pkt. 20c**

Delicate lavender. Perennial in an attractive lavender-blue, 1 1/2-ft.

—*Delicate Pink*. **SCAB-3. Pkt. 20c**

Orchid pink with a pink sheen, 2-ft.

—*Imperial Giants*, Hybrids. **SCAB-4. Pkt. 10c; 1/2 oz. 50c**

A great advance in annual *Scabiosa* development extremely large well formed flowers which are fully double, composed entirely of broad frilly petals, rounded beehive shape; plants very upright, long wiry stems and excellent for florist or garden planting; new and unusual colors, 3 1/2-4-ft.

—*Imperial Giant*, Blue Moon. **SCAB-5. Pkt. 10c; 1/2 oz. 60c**

Large dark lavender-blue, made up of broad, heavy, waxy petals without the pin-cushion center, pretty.

—*Giant Flowering Hybrids*. **SCAB-6. Pkt. 20c**

An extra select large flowering compact hot house strain.

EIGHT SPECIAL STRAINS ANNUAL**SCABIOSA:**

Definitely a much better strain than the ordinary strains; selected by one of the best flower seed growers thru many years, these varieties have been improved to near perfection in purity, size of bloom, as well as in the length of the strong wiry stems. We especially recommend these varieties to critical *Scabiosa* growers.

—*Ageratum Blue*. **SCAB-7. Pkt. 10c; oz. 90c**

Pretty light blue.

—*Azure Fairy*. **SCAB-8. Pkt. 10c; oz. 90c**

Azure blue, fine color.

—*Loveliness*. **SCAB-9. Pkt. 10c; oz. 90c**

Salmon rose shades.

—*Orchid Shades*. **SCAB-10. Pkt. 10c; oz. 90c**

Soft rose-lavender blends.

—*Peach Blossom*. **SCAB-11. Pkt. 10c; oz. 90c**

Peach blossom pink.

—*Rosette*. **SCAB-12. Pkt. 10c; oz. 90c**

Deep suffused salmon.

—*Salmon Beauty*. **SCAB-13. Pkt. 10c; oz. 90c**

Pure salmon, rich coloring.

—*Shasta Improved*. **SCAB-14. Pkt. 10c; oz. 90c**

Pure white of enormous size.

—*Mend of Above 8 Varieties*. **SCAB-15X. Pkt. 10c; oz. 90c; 1/4 lb. \$3.00**

SCHIZANTHUS

(sky-ZAN-thus)

Beautifully marked and unusually formed flowers in chamois, rose, lavender, and purple shades with fern-like foliage. Excellent for pot culture the year round and partly shaded beds, doing best in cool climate; pinch tops off young plants to induce bushy plants; for winter use, sow in Sept., for February to May bloom; for summer bloom, outdoors, sow indoors in March, setting plants out when weather becomes warm in May. *Schizanthus* makes up beautifully in corsages, are long lasting and very pretty, 1 1/2-ft.

—*Dr. Badger's Hybrids*. **SCHZ-1. Pkt. 20c**

Large flowers, brilliant range of colors from light pink to deep purple through rose, but without any whites. Each flower with a large golden blotch. Plants compact, 12-14-in. tall. Outstanding for the best florist's trade.

—*Butterfly Mixture*. **SCHZ-2. Pkt. 15c**
A fine bright mixture free flowering, compact pyramidal plants, 12-15-in.

—*Chislehurst Hybrids*. **SCHZ-4. Pkt. 15c**
A large flowered pretty French strain in violet and purple shades.

—*Schizanthus Blend*. **SCHZ-5X. Pkt. 15c; 1/4 oz. 95c**

Blend of above strains and others from different growers. High class in every way.

—*wisetonensis*. **SCHZ-6. Pkt. 20c**

Hybrid between *S. pinnatus* and *S. grahmi* showing many variations in color and form, rose shades, 16-in.

SEDUM (SEE-dum)

Mostly hardy, succulent or fleshy, erect or prostrate plants, easily grown and of much use in rock gardens. They do best in a light soil and a sunny location; no rock garden can be considered complete without its *Sedums*; they are especially appealing to children. Sow seed in summer when the seedlings can be wintered over for setting out in their permanent position in the spring, or they can be started in the spring.

—*caeruleum*, *azureum*. **SEDM-1. Pkt. 20c**
Blue flowered annual for rockery.

SENECIO (se-NEE-shi-oh)

Groundsel. Large and variable genus, herbs, shrubs and trees belonging to Daisy Family, including the florist pot plant *Cineraria*. In general, they are easily grown in good loamy soil.

—*diversifolia*. **SENE-5. Pkt. 25c**

—*jacqmontiana*. **SENE-6. Pkt. 15c**
Collected in the Himalayas, but we have no description as yet.

—*purshiana*. **SENE-3. Pkt. 20c**

A native western species, light gray foliage, 6-10 inches tall.

—*scandens*. **SENE-4. Pkt. 25c**

Very attractive low climber with loose panicles of yellow-rayed daisies in summer; fairly hardy but should have some winter protection in N. Fine grown against a south wall, HHP, 3-4 ft.

SIDALCEA (si-DAL-see-ah)

Flowers are like miniature *Hollyhocks* in spikes or clusters; should be planted in rich sandy soil; the perennial species bloom over a long period; usually about 1-2 ft. tall.

—*Stark's Hybrids*. **SIDA-1. Pkt. 15c**

Hardy perennial in a wide color range; flowers like miniature *Hollyhocks*, 3-ft.

SIEVERSIA (se-VER-se-a)

A small group of Western plants closely related to, and often called, *Geum*; one or two are also found in N.E. Asia. They are rather dwarf, hardy perennials, with compound leaves and *geum*-like flowers, but are much more hardy; suited to the rock garden or wild garden. Culture same as for *Geum*.

—*ciliata*. **SIEV-1. Pkt. 30c**

Soft, rather hairy deep cut leaves and flowers of old rose and cream followed by plummy seed heads. A plant of cool grassy meadows in the Rockies, easily grown in the rock garden in full sun or light shade, likes a fair amount of moisture, HP, 6-18 inches.

SILENE (sy-LEE-nee)

Catchfly. Annual, biennial and perennials of the Pink Family, in all forms in many species. Many are showy and of value in the garden or rock garden. If seed of the annuals is sown in the fall much earlier flowers will be secured.

—*armeria pendula*. **SILE-1. Pkt. 10c**

Double Mixed. A smooth plant with clusters of rose and white flowers; July-Sept. Sow seeds in position in late fall or early spring, 20-in.

—*compacta*, Peach Blossom. **SILE-2. Pkt. 15c**

Dwarf Double. Soft hairy foliage and flesh colored flowers in graceful drooping racemes, mid-summer, 10-in.

—*New Art Shades*. **SILE-3. Pkt. 15c**

Dwarf Double. A splendid mixture containing all the new colors; a choice rock garden strain.

—*White*. **SILE-4. Pkt. 10c**

Lobel's Catchfly. Hardy annual, 6-in. in pure white.

—*fortunei*. **SILE-5. Pkt. 10c**

Bright rose, perennial best grown as a hardy annual.

—*schaffa*. **SILE-6. Pkt. 15c**

Perennial, rosy-purple flowers, trailing habit; pretty border or rock plant, 6-in.

SMILACINA (smy-lah-SY-nah)

Perennial woodland plants called False Solomons Seal. (Lily Family). They have creeping root stalks, leafy stems and small flowers in terminal clusters followed by red or greenish berries. Easily colonized in the wild garden.

—*stellata*. **SME-1. Pkt. 20c**

Wild Lily-of-the-Valley. Pretty white flowers, 8-12-in. tall, May-June. Found in the north-western states.

SOLANUM (soh-LAY-num)

A very large genus, the species most of interest having colored berries which are very decorative; they usually are grown as pot plants for winter use. Commonly known as Jerusalem Cherry.

—*capsicastrum nanum*. **SOLN-1. Pkt. 15c**

Greenhouse plant, 15-in. tall, having small red ornamental fruits.

—*Cleveland*. **SOLN-2. Pkt. 20c**

A select variety of Jerusalem Cherry, nice foliage and bright fruits, for pots.

—*Hlavacek's Masterpiece*. **SOLN-3. Pkt. 20c**

Compact variety, 15-in., bright berries.

—*Henderson New Paterson*. **SOLN-4. Pkt. 20c**

Upright, orange-red, compact, 12-in.

—*ciliatum macrocarpum*. **SOLN-5. Pkt. 25c**

Scarlet fruits.

—*racemigerum*. **SOLN-6. Pkt. 20c**

Red Currant Tomato.

—*nigra*. **SOLN-10. Pkt. 35c**

Mixed *Solanum*. **SOLN-7X. Pkt. 15c**

All species and varieties mixed.

SOLDANELLA

(sol-dah-NEL-ah)

Perennial plants of Primrose Family having nodding blue, violet or white fringed flowers, native of Alps. Plant in moist shady places in rock garden.

—*alpina*. **SOLD-1. Pkt. 25c**

Grows 6-in. tall, roundish leaves and pale blue fringed flowers.

SOLIDAGO (sol-i-DAY-goh)

Erect perennials, with golden yellow Goldenrod Flowers. The Goldenrod is a very common and popular flower, it being the state flower of Nebr., Ky., and Ala.

—*longata*. **SOLI-1. Pkt. 20c**

Tall Goldenrod. A western species from Mont., compact flower clusters, yellow flowers, 1-3-ft. tall, July-Aug.

—*missouriensis*. **SOLI-2. Pkt. 20c**

Dwarf Goldenrod. Western species, yellow flowers 6-8-in. tall, flowering June-Aug.

SOPHORA (soh-FOH-rah)

Showy when in bloom and of ornamental value can be grown from seed.

—*tomentosa*. **SOPH-1. Pkt. 50c**

Ornamental shrub 5-7 ft. with racemes of showy yellow flowers, native of Texas.

—*secundiflora*. **SOPH-2. Pkt. 50c**

Mescal-bean. Not hardy North; fragrant violet-blue flowers, 1 inch long; seeds are poisonous if eaten.

SPHAERALCEA

(sfee-RAL-see-ah)

Globe Mallows. Warm region plants and shrubs grown in gardens for their red and violet flowers. The flowers are mallow-like.

—*rivularis*. **SPHA-1. Pkt. 20c**

Wild *Hollyhock*. This is good in the border, a western species, pink flowers, 3-5 feet, June.

STATICE (STAT-i-see)

Sea Pinks, Thrift. Consist of dwarf perennial plants much used in rock gardens and for edging; included are those formally classed under *Armeria* (*Armeria*), but the plants usually called *Statice* as grown in gardens and by florists are *Limonium*, which seeds. They are easily grown in ordinary garden soil.

—*caspia*. **STAT-7. Pkt. 15c**

—*armeria*, Var. *alpina*. **STAT-1. Pkt. 15c**

A bright rose perennial, foliage a compact tuft, for cutting or border; does best in dry sandy soil and sun; flowers are on stiff wiry stems above foliage tipped with dense globe-shaped flowers; May-June; HP, 6-in.

—*formosa Hybrids*. **STAT-2. Pkt. 15c**

Deepest to lightest rose shades of pink, coral and light reds, charming mixture, perennial, 1 1/2-ft.

—*Armeria formosa hybrida*. **STAT-2T. Pkt. 25c**

Large flowers in many shades, HP, 1 1/2-ft.

—*Giant Pink*. **STAT-3. Pkt. 20c**

Clear rose pink flower 2-in. across, borne freely on straight strong stems, 1-ft. to 1 1/2-ft. above growing mat-like plants, 2-ft.

—*Large Flow Hybrids*. **STAT-4. Pkt. 20c**

The largest and best hybrids, 1 1/2-ft.

—*perezii*. **STAT-8. Pkt. 25c**

Rich bright blue, HP.

—*latariaea*. **STAT-5. Pkt. 15c**

Perennial, rose colored.

—*Statice Blend*. **STAT-6X. Pkt. 10c**

All species and varieties.

STOCKS: See Mathiola.

STREPTOCARPUS

(STREP-toh-kahr-pus)

Cape-primrose. Choice herbaceous plants akin to *Gloriosa* and *Saintpaulia*, usually stemless with showy blue or purple flowers and broad basal leaves; easily grown in Feb. in a cool greenhouse producing blooming plants the following winter. They are grown as an indoor pot plant.

—*achimeneaeiflorus*. **Mixed. STEP-1. Pkt. 35c**

—*orchid flowered*. **STEP-2. Pkt. 35c**

STYRAX (STY-rax)

Deciduous and evergreen shrubs and trees native of the warmer regions; they are very attractive in habit and with showy white flowers in clusters or racemes. Do best in light and well drained soil; a few are hardy in the North. They make pretty shrubs and lawn specimens.

—*Hookeri*. **STAX-1. Pkt. 30c**

SWEET PEAS

We list the top varieties in Sweet Peas and while many fine varieties are offered under many different names, we adhere strictly to the introducer's name; by trials ourselves and many reports from our customers in all sections of the country as well as very extensive trials by our Sweet Pea growers in California, we are able to discard the varieties that have been surpassed by newer introductions and we are positive that, if your varieties are selected from the list we present, you will have the best varieties one could possibly secure.

A hardy annual climber requiring rich deeply worked soil containing clay but with good drainage; sunny situations are best but not exposed to hot dry winds during the summer. It is better if the soil can be manured and worked in the fall so that the soil will be in good physical condition in the spring; 1 1/2-2 ft. is not too deep to work the soil in the fall. Sow seeds as early as possible, 2-in. apart and 3-in. deep covering with but 1-in. of soil and then gradually filling in the other 2-in. as the plants grow; some sand mixed in the top soil, especially with the white seeded sorts, will help. Thin plants to 3-in. apart. It is important that the support given the vines be rigid at the bottom so that the wind will not be able to tear the roots or disturb them by jerking the supports. Keep flowers picked for best bloom.

SPENCER VARIETIES:

The most popular type for garden use and will produce the prettiest flowers; while all other types have their good points, the Spencers will satisfy most growers. We list a selection of the very best varieties here, each in its color classification, and we feel sure you will have little chance of finding better ones.

Prices: All Spencer varieties: **Pkt. 10c; oz. 30c; 1/4 lb. \$1.10**

—*Barbara*. **SPEA-1. Pkt. 10c**

A fine salmon.

—*Bonny Brier*. **SPEA-2. Pkt. 10c**

Beautiful rose-pink, large flowered.

—*Capri*. **SPEA-3. Pkt. 10c**

Beautiful light blue, long stems and a vigorous grower.

—*Charming*. **SPEA-4. Pkt. 10c**

Rose cerise.

—*Flagship*. **SPEA-5. Pkt. 10c**

Deep navy blue, large sized flowers and perfect form, artistically placed on long strong stems, a Silver Medal winner, Scot. Nat. S.P. Sec.

—*Flamingo*. **SPEA-6. Pkt. 10c**

Orange scarlet cerise.

—*Flora*. **SPEA-7. Pkt. 10c**

Clear deep lavender.

—*Golden Dragon*. **SPEA-8. Pkt. 10c**

Golden orange, wings orange rose.

—*Grand Slam*. **SPEA-9. Pkt. 10c**

Bright scarlet-cerise shaded orange, sun-proof, a showy color of great appeal both for garden display or for cutting.

—*Loch Lomond*. **SPEA-10. Pkt. 10c**

The best mahogany.

—*Maytime*. **SPEA-11. Pkt. 10c**

Golden cerise.

—*Patricia Unwin*. **SPEA-12. Pkt. 10c**

Beautiful golden salmon on cream ground color, beautiful.

—*Pinnacle*. **SPEA-13. Pkt. 10c**

Rich deep rose-pink with a touch of white near the base, stems unusually long and strong.

—*Red Supreme*. **SPEA-17. Pkt. 10c**

TULIPA (TEW-li-pah)

There are great many wild species of Tulips that are greatly admired by fanciers, especially for the rock garden and some of these have been used in breeding the newer strains of border varieties. Many of the species are rather small in both plant and flower but some have the largest and most brilliant blooms of the entire genus, with some having several flowers to the stem. Seed requires several weeks to germinate and should be sown early in pots or carefully prepared seed beds, several years are generally required for the bulbs to reach blooming size but in this way a collection of rare and expensive kinds can be acquired at little expense.

—**stellata.** TULP-1. Pkt. 50c
Narrow buds open to widely expanded flowers, the outer segments flushed with carmine, the inner white, blotched yellow at base; close to lovely T. clusiana, and quite rare. Likes light sandy soil in sun, and fine for rock garden or border, HEB, 6-16 inches.

UNIOLA (eu-NY-oh-lah)

Spike Grass. Native perennial grasses. Some species are grown as ornamental grasses.

—**laetifolia.** UNIO-1. Pkt. 15c
Perennial, 5-ft., pretty in the border.

URSINIA (ur-SIN-i-ah)

Mostly hardy annuals having daisy-like flowers in orange shades on long wiry stems standing 2-3-ft. above low tufts of finely cut foliage; plants bloom profusely in mid-summer to late fall making a colorful addition to the sunny border; they can be potted up for winter bloom indoors.

—**methoides.** USIN-1. Pkt. 15c
Jewels-of-the-Veldt, orange flowers with deep purple centers, 1-2 ft.

—**Hybrids.** USIN-2. Pkt. 15c
Pretty yellow and orange shades.

VACCINIUM (vak-SIN-i-um)

Deciduous shrubs and trees native of the colder parts even to the Arctic Circle; it included plants known as Blueberry, Cranberry, Cowberry, Wortleberry, etc. Some are grown for their ornamental foliage and others for their fruits. They are easily grown from seed and require a lime free soil, thriving best in a sandy, moist peat soil.

—**donicum.** VACC-1. Pkt. 25c

VALERIANA

(vah-lee-ri-AY-nah)

Hardy plants with small white or rose flowers in spikes or flat-topped clusters; easily grown and valuable for garden effect or for cut flowers. Known as Garden Heliotrope on account of its fragrance; they are excellent hardy border plants.

—**rubra, Mixed.** VAL-1. Pkt. 15c
Perennial alpine species in White, rose and dark red.

VANDA (VAN-dah)

Beautiful tropical epiphytic orchids, having racemes of fragrant white, lilac, blue or greenish flowers, usually with sacs or spurs; they require a high temperature and humid atmosphere during the growing period, during the winter a drier and cooler place and exposed to the sun. See Orchids.

—**caerulea.** VAND-1. Pkt. \$1.00
Blue Orchid. Light blue flowers, 4 inches across in erect racemes, 18 inches tall; from the Himalayas.

VENDIUM (ve-NID-i-um)

Hardy annuals and perennials allied to the Arctotis; their brilliant orange or yellow flowers suggest small sunflowers; they are valuable in the garden or greenhouse as a color accent and are valuable cut flowers. Generally grown as annuals by starting the seed indoors; space a foot apart, in sunshine and well drained soil.

—**calendulaceum.** VNID-1. Pkt. 10c
2-in. single golden yellow flowers with black centers, hardy annual, 10-in.

—**fastuosum, Golden Orange.** VNID-2. Pkt. 20c
Beautiful golden orange flowers with dark centers 4-in. across, silky gray foliage, 2-ft.

—**Hybrids.** VNID-3. Pkt. 20c
Double rowed daisies with 3-4-in. flowers in pastel colors of cream, primrose, buff, lemon, orange, usually with irregular zoning of brown, blue or black, 2-ft.

VERBASCUM (ver-BAS-kum)

Thrive in full sunshine and hybridize readily with the genus Celsia, producing many new color forms. As a rule they make good specimen plants in the background of the hardy border.

—**phoeniceum Hybrids.** VEBS-1. Pkt. 15c
Grows 5-ft. flowers with prominent purple stamens. The hybrids are beautiful and come in a varied combination. Perennial.

VERBENA

Perennial in the South but grown as hardy annuals in the North, sowing seeds indoors and transplanting outdoors in May, 1-ft. apart, or seeds can be sown direct in April or May, blooming in mid-summer. Colors pink, rose, red, lavender, blue, purple and white, thriving in poor soil and withstanding drought well.

HORTENSIS (Garden Verbena).

—**Giganteo Mixed.** VERB-1. Pkt. 15c; ¼ oz. 90c

This strain should not be confused with the ordinary Verbenas; both the trusses and flowers are much larger and the plants decidedly more vigorous. Most of the varieties in this strain produce more compact masses of up-standing flowers over the entire plant than any other strain.

—**Hybrids gr. fl.** VERB-2. Pkt. 15c; ¼ oz. 60c

Mammoth, Choice Mixed. Robust spreading growth, plants often 2-ft. across, flowers 1-in. across, quick to come into flower.

—**gr. fl. Beauty of Oxford.** VERB-3. Pkt. 15c; ¼ oz. 75c

Hybrids, a beautiful giant strain in shades of rose-pink to rose-red, brightest, produced from plants with the florets 1-in. across.

—**Verbena Blend.** VERB-4X. Pkt. 15c; ½ oz. \$1.00

A blend of all the giant flowered annual Verbenas, including those above.

VARIOUS SPECIES:

—**abyssinica.** VERB-12. Pkt. 50c

—**aubletia compacta.** VERB-5. Pkt. 15c
A new variety, dark violet-red, 10-in. high, blooming end of June till frost, hardy annual.

—**purpurcarmin.** VERB-6. Pkt. 15c
Large flowered, 15-in. tall, blooming end of May till frost, dark carmine.

—**bipinnatifida.** VERB-7. Pkt. 15c
Blooms June till Nov. continuously in showy blue-lavender clusters; ferny, feathery foliage, usually winter hardy perennial but so quick it may be treated as an annual.

—**bonariensis.** VERB-8. Pkt. 15c
3-ft. high, a new Swiss type, fine for cut flowers, highly recommended.

—**Tobaty Variety.** VERB-9. Pkt. 20c
By far the best and showiest strains of this species, coming from the Arroya Tobaty of Paraguay; compared with the usual strains of this species, it is more floriferous, the trusses heavier, more massive and compact; blooming season covers several months, color soft bluish-lavender; spectacular in the border, 3-ft.

—**erinoides type.** VERB-10. Pkt. 15c
Heat resisting plant spreading into a fine carpet, violet flowers.

—**Venosa.** VERB-11. Pkt. 15c
Compact purple clusters, 10-in. tall, perennial grown as an annual.

VERBESINA

—**enceloides.** VEBE-1. Pkt. 20c
40-in. Butter Daisy. A showy and easy annual, quick from seed, that doesn't seem to know when to stop blooming. Big butter-yellow daisies with wide jagged petals and tufted cushion centers, yellow also. It cuts.

VERONICA (ve-ROH-i-kah)

Annuals and perennials highly useful in the border and rock garden; hardy, free flowering, thrive in an open sunny position or light shade, easily grown from seeds.

—**altissima.** VERO-3. Pkt. 25c

—**spicata ensiana.** VERO-2. Pkt. 15c
Blue or pink flowers in spike-like racemes, 1½-ft., perennial.

VIBURNUM (vy-BUR-num)

Deciduous and evergreen shrubs and trees widely distributed in the northern hemisphere; they are among the most ornamental and useful shrubs and make good shrubby plants in the shrub border. Their foliage is especially beautiful in the fall; flowers are showy and followed by attractive fruits. Sow seeds when ripe or stratify them when received.

—**erubescens.** VIB-1. Pkt. 25c

—**coriaceum.** VIR-2. Pkt. 25c

—**stellatum.** VIR-3. Pkt. 25c

—**nervosum.** VIR-4. Pkt. 25c

VINCA ROSEA (VIN-kah)

Madagascar Periwinkle is a tender perennial grown in the North as an annual. It is a good garden subject with rosy purple flowers and used in parks as a bedding plant with good effect; sow seeds early in a warm greenhouse and try to transplant several times before setting out. Sun or partial shade.

—**Pure White.** VINC-2. Pkt. 10c

—**Crimson.** VINC-3. Pkt. 10c

—**Mixed.** VINC-4X. Pkt. 10c

VIOLA

The genus includes a number of species of small, mostly perennial, plants having attractive blue, white, lavender or yellow spurred flowers in early spring or summer. The Pansy is the best known (see Pansy). Violets are second in popularity. All are propagated by seeds. They like sunshine but not the hot kind.

CORNUTA: Flower with very long spur, and called Tufted Pansies or the garden Viola. They are very pretty for edging the border or for ground cover under trees. Grow very much as you would Pansies.

—**Bicolor.** VIOL-1. Pkt. 25c
(V. papilio). Light violet-blue, very pretty.

—**Blaue Schonheit.** VIOL-3. Pkt. 25c
A new large German variety in pure clear blue, highly recommended.

—**Orange Triumph.** VIOL-4. Pkt. 25c
A new blend of new colors in Violas, highly recommended Swiss strain.

—**Above Varieties Blended.** VIOL-6X. Pkt. 20c

—**Nigra, Black Imp.** VIOL-7. Pkt. 25c
Quaint little pansy-flowers that seem to have been nipped from black velvet, exceedingly floriferous, comes true from seed, 3 months to bloom; treat as an annual.

—**Scotch Hybrids.** VIOL-8. Pkt. 25c
Extra choice bedding Violas that are highly recommended. An outstanding variety.

—**S. & G. Special Blend.** VIOL-10. Pkt. 25c
This is the best blend of Violas grown by one of our Netherlands growers and of which they highly recommend.

—**W-F Special Blend.** VIOL-11. Pkt. 35c; Pkt. 25c

This blend of bright gay colors far surpasses any mixtures of Violas we have ever seen. The bright shades of self colors of red, yellow, blue and apricot combined with many shades which are blotched make these a supreme mixture.

—**saxatilis.** VIOL-12. Pkt. 25c
Downside Strain, Johnny-Jump-Ups. Color selections of Viola saxatilis. Little "pansy" flowers in extraordinary profusion from late spring to late autumn. Range of color variation exceedingly wide, not easy to find two plants with flowers alike. This strain seems to withstand summer heat rather better than do Johnny-Jump-Up strains selected from Viola tricolor. Best treated as Annual.

—**Blend of all Violas.** VIOL-13X. Pkt. 20c
This is made up of all the above and other varieties.

VIRGINIA STOCKS. See Malcomia.**VISCARIA (vis-CAR-i-ah)**

Start indoors in March or April, germinating them warm and in light.

—**nana compacta, Fiery Red.** VISC-9. Pkt. 10c

—**nobilis.** VISC-9. Pkt. 20c

—**oculata, Loyalty.** VISC-6. Pkt. 10c
Graceful plants 1-ft. high bearing dur-

ing the summer large showy brilliant flowers each with a dark center.

—**Rose Beauty.** VISC-7. Pkt. 10c

—**Best Mixed.** VISC-8. Pkt. 10c

WAHLENBERGIA

(wahl-en-BUR-ji-ah)

A genus of small annual and perennial plants of Bellflower Family with nodding bell-shaped blue flowers. They resemble Bellflowers and are fine for rock gardens especially in open and well drained positions. Grow as you would Campanulas.

—**mareis, alba.** WAHL-1. Pkt. 20c
Very pretty biennial, with Blue-bell flowers, blooming July-Aug. Germinate cold and in light.

—**grandiflora.** WAHL-2. Pkt. 20c

WALLFLOWER

Cheiranthus (kay-RAN-thus) Cheiri. A genus of perennials some of which rank among the showiest of the garden perennials. Under this classification are the English wallflowers. Seed should be sown in the eastern part of the country, early in the summer and the seedlings transplanted a couple of times, pinching the tops back to induce bushy growth; the young plants can then be wintered over in cold frames and set out for flowering the next spring; light loamy soil having some lime seems to be best. In mild climates they can be wintered over in the open ground and in the West the annual sorts can be easily grown.

C. cheiri:

Most of the Wallflowers offered here are English grown and from the very best source; they are all high class.

—**Blood Red.** WALL-6. Pkt. 25c
Single variety, highly selected stock, fine color, HP, 1½ ft.

—**Cloth of Gold.** WALL-7. Pkt. 25c
Popular large flowered, rich yellow variety, HP, 1½ ft.

—**Early Wonder.** WALL-2. Pkt. 15c;
New class of double Wallflower, golden yellow, flaked with green, HP, 2 ft.

—**Eastern Queen.** WALL-8. Pkt. 25c
Pretty shade of salmon-red, effective bedder, HP, 1½ ft.

—**Ellen Willmott.** WALL-9. Pkt. 25c
Ruby-red, unique and attractive color, HP, 1½ ft.

—**Feltham Early.** WALL-10. Pkt. 25c
NEW. Fine red-brown color, very early, HP, 1½ ft.

—**Fireball.** WALL-3. Pkt. 15c
This is a new Swiss variety of fiery red color that is exceptionally good. Perennial.

—**Fire King.** WALL-11. Pkt. 25c
Rich orange-red, remarkably fine and effective, HP, 1½ ft.

—**Goliath.** WALL-4. Pkt. 20c
The beauty of this variety cannot be excelled even by the double strains.

—**Golden Monarch.** WALL-12. Pkt. 25c
A rich yellow counterpart of our Vulcan, HP, 1 ft.

—**Ivory White.** WALL-13. Pkt. 25c
Nearest approach to white, a useful contrast, HP, 1½ ft.

—**Orange Bedder.** WALL-14. Pkt. 25c
Rich orange shading to apricot-yellow, a striking color, HP, 1 ft.

—**Primrose Monarch.** WALL-15. Pkt. 25c
Counterpart to our Golden Monarch, a beautiful primrose color, HP, 1 ft.

—**Ruby Gem.** WALL-16. Pkt. 25c
Very large and fine ruby-violet, HP, 1½ ft.

—**Vulcan Improved.** WALL-17. Pkt. 25c
Rich velvety, crimson flowers, a great improvement, HP, 1 ft.

—**Forcing Annuals Mixed.** WALL-1. Pkt. 10c; oz. 70c
This is an early annual, suitable for forcing, in best color blend, 18-inches.

XANTHISMA (zan-THIZ-mah)

A genus of annual and biennial plants with narrow leaves and yellow ray flowers in heads. Suitable for dry open places and seed should be sown where plants are to grow.

—**texanum.** XANT-1. Pkt. 20c
"Star of Texas". Annual making the most brilliant showing of vivid sun reflecting golden yellow of any annual flower, no exceptions; continuous bloom from late June till end of Oct; flowers are big, many pointed stars of polished gold, cuts well and withstands heat and drought well, 2-ft.

—**annum, Double Mixed.** XERN-1. Pkt. 10c; oz. 90c
Easily grown everlasting with white downy foliage and pink, purple and white flowers, 1½-in. across; they are grown mainly for their papery flowers for drying; best to sow in rows in the garden when weather becomes warm, thinning out later to 6-in. or so apart, 3-ft. tall.

XERANTHEMUM

(zee-RAN-thee-mum)

—**annum, Double Mixed.** XERN-1. Pkt. 10c; oz. 90c

—**annum, Double Mixed.** XERN-1. Pkt. 10c; oz. 90c
Easily grown everlasting with white downy foliage and pink, purple and white flowers, 1½-in. across; they are grown mainly for their papery flowers for drying; best to sow in rows in the garden when weather becomes warm, thinning out later to 6-in. or so apart, 3-ft. tall.

ZYGADENUS (zig-ah-DEE-nus)

—**gramineus.** ZIG-1. Pkt. 20c

ZINNIA

Zinnias are warm weather loving plants and should never be sown until the soil has thoroughly warmed up and all danger of frost has passed. For best results, especially with the smaller flowered, early blooming varieties, we recommend sowing the seeds where the plants are to flower. The taller growing large flowered sorts can safely be transplanted, although they also will make more robust growth and will produce more flowers if they can be planted where they are to remain and when the seedlings are 3-4-in. tall, thinned out to the proper distance. To induce a thrifty, heavy root system, irrigate your plants rather than merely sprinkling them. Dig a little trench along side the rows and let the water run slowly for several hours so that it will seep down deep into the soil and make the plant food available for the plants throughout the mass of feeding roots. Always cultivate after each irrigation to conserve the moisture; by this method you will have to water zinnias only once every two weeks or so, it gives a stronger, healthier plant and saves on the water bill.

DAHLIA-FLOWERED

These were introduced in 1919 and since that time all the best colors have been included. The plants are 2½-3-ft. tall, very robust and bearing many strong stems of fully double, huge flowers which resemble the show type Dahlia.

—**Canary Bird.** ZIN-1. Pkt. 15c; oz. \$1.00
Rich canary yellow color.

—**Crimson Monarch.** ZIN-2. Pkt. 15c;
Very large flowered deep crimson.

—**Dream.** ZIN-3. Pkt. 15c; oz. \$1.00
Most unusual deep rosy lavender.

—**Exquisite.** ZIN-5. Pkt. 15c; oz. \$1.00
Light rose with a deep rose center.

—**Golden Dawn.** ZIN-4. Pkt. 15c; oz. \$1.00
The best rich golden yellow.

—**Oriole.** ZIN-6. Pkt. 15c; oz. \$1.00
Immense blooms of deep orange, crimson and gold.

—**Polar Bear.** ZIN-7. Pkt. 15c; oz. \$1.00
Large creamy white.

—**Will Rogers.** ZIN-8. Pkt. 15c; oz. \$1.00
A lovely brilliant scarlet red.

—**Dahlia-Flowered Blend.** ZIN-9X. Pkt. 10c; oz. \$1.00

GIANTS OF CALIFORNIA

These were introduced in 1926 and have rapidly gained in popularity. The plants are 3-4-ft. tall with long stems which adapt it particularly for use as a cut flower; the flowers are large and flat giving a graceful effect.

—**Enchantress.** ZIN-10. Pkt. 15c; oz. \$1.00
Pretty light rose with deep rose center.

—**Golden Queen.** ZIN-11. Pkt. 15c;
Golden yellow.

—**Grenadier.** ZIN-12. Pkt. 15c; oz. \$1.00
A bright dark red.

—**Lavender Queen.** ZIN-13. Pkt. 15c;
Deep rosy lavender.

—**Miss Willmott.** ZIN-14. Pkt. 15c;
Large flowers of soft rich pink.

—**Orange Queen.** ZIN-15. Pkt. 15c;
Golden orange.

—**Purity.** ZIN-16. Pkt. 15c; oz. \$1.00
Best white in any Zinnia.

—**Scarlet Queen.** ZIN-17. Pkt. 15c;
Glowing deep scarlet.

—**Cal. Giants, Mixed.** ZIN-18X. Pkt. 10c;
This is a high class blend of varieties.

—**Super Giants, Mixed.** ZIN-19. Pkt. 15c;
A vastly improved strain of the Crown O'Gold type with large well formed flowers in soft pastel shades, each petal overlaid at the base with deep golden yellow.

—**Super Fantasy.** ZIN-20. Pkt. 15c;
Flowers are 3-in. in diameter, shaggy-petaled and on long stems, making excellent cut flowers. They are strikingly beautiful.

—**Harmony Type.** ZIN-21. Pkt. 15c;
Scabious-Flowered, plants 2½-3-ft. bearing numerous medium sized flowers, resembling the annual Scabiosa and Harmony Marigold. Bright shades including crimson, scarlet, orange, yellow, pink and white.

—**gaillardia-Flavored.** ZIN-22. Pkt. 15c;
Navajo. Flowers resemble a Picta Double gaillardia, in both form and coloring. Finest mixed, bicolors, mellow tones, fine for cutting, 2-ft.

—**Howard's Giants.** ZIN-23. Pkt. 15c;
A striking new large flowered crested cutting zinnia, resulting from a cross between the Dahlia-flowered and Harmony types. The plants are 3-4-ft. tall and the flowers large. They come about 80% crested.

—**Cactus-Flowered Giants.** ZIN-24. Pkt. 15c; oz. \$1.00
This is an improved Fantasy type with flowers averaging 4½-in. across, plants 30-in. tall.

—**Fantasy Types.** ZIN-25. Pkt. 15c;
Petals are long, curved and pointed, resembling those of the night flowering cactus. Flowers are 4-in. across and 2-in. deep. This strain includes Star Dust and other colors.

—**Black Ruby.** ZIN-39. Pkt. 15c

—**Crimson Gem.** ZIN-26. Pkt. 15c;
A new dainty bicolored rose, pretty.

—**Dainty Gem.** ZIN-27. Pkt. 15c;
Beautiful golden orange color.

—**Golden Gem.** ZIN-28. Pkt. 15c;
Beautiful golden orange color.

—**Golden Orange.** ZIN-29. Pkt. 15c;
Scarlet Gem.

—**Salmon Rose.** ZIN-38. Pkt. 15c

—**Valencia.** ZIN-31. Pkt. 15c; oz. \$1.00
Burnt orange.

—**Pastel Shades.** ZIN-32. Pkt. 15c;
Tom Thumb.

—**Tom Thumb.** ZIN-33. Pkt. 15c
Plants 6-8-in. tall, compact, covered with well formed flowers of the Lilliput Type. Color range thru red, orange, yellow, pink, rose and other pastel shades. Excellent for pot plants and border use.

—**Elegans pumila.** ZIN-34. Pkt. 15c;
Double Sunshine Tints. The Cut and Come Again type, in the best pasted shades. Sunshine Tints are richer in color and more full bodied than ordinary types, and include many autumn tints of bronze, golden yellow, apricot and rich rose as well as the regular delicate pinks, creamy yellows, soft flesh tones and

VEGETABLE SEEDS

All prices are post paid, unless mentioned otherwise. Quarter and half pound lots, at pound rate. We will be pleased to quote, on request, lowest prices on larger quantities.

ASPARAGUS.

Easily grown from seed which should be sown as early in the spring as possible. Thin the seedlings 3-4 inches apart and transplant to their permanent location when 1 or 2 years old, spacing them 18 inches apart in 2 1/2, or more, foot rows. A pkt. will produce 100 plants; 3 oz. for 100 ft. row; or 12 lbs. per acre. Seeds break ground in about 20 days. 4000 roots required per acre.

Mary Washington.

Pkt. 10c; oz. 20c; lb. \$1.50
This is the best of all the varieties; is rust proof and blight resistant; shoots are long without branching and resists hot weather without blowing out.

BEANS. Bush Varieties.

Bush beans do well in most any medium rich garden soil with the wax sorts doing their best on a more sandy soil. Plant after danger of frost, in rows about 28 inches apart, sowing 1/2 inch deep and about 2-3 inches apart in the row. Packet will plant 100 feet and contains about 10 oz. of seed; a good bushel or 60 lbs. per acre.

GREEN PODDED SORTS:

Bountiful. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
48 days. Early flat podded, stringless and of highest quality; excellent shipper. It is reliable everywhere, excellent for freezing, seed flesh color.

Burpee Stringless. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
49 days. A very popular old standby and probably the best seller, especially valuable for the home garden; very meaty and stringless; seed chocolate color.

Dwarf Horticultural. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
54 days. Pods 5 inches long, flat, almost stringless when young; used both as a string or shell bean. The pods are splashed with red; making them very attractive for market display; best early green shell bean. Also called bush Cranberry Bean. They are good for dry beans.

Full Measure. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
54 days. A very popular round green podded sort in the Ohio Valley, pods 6 inches long, stringless and of the best quality.

Giant Stringless Green Pod. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
51 days. A meaty round podded sort, very popular all over the U. S. and excellent for all uses, strong grower; seed brownish-red.

Keystonian. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
52 days. Dark green pods, 6-6 1/2 inches long round, best quality and doing best in all sections.

Red Valentine. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
49 days. One of the main round podded sorts in the south, it making excellent string beans under adverse conditions; very popular in the mountain regions also; slightly stringy; seed red, marbled.

Tendergreen. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
53 days. An extra good quality round podded sort, excellent flavor and very popular everywhere; seed bluish, mottled.

Tennessee Green Pod. Pkt. 25c; lb. 45c; 5 lbs. \$2.00
49 days. A popular flat green pod, with strings, mainly in the mountain sections of W. Va., Ky. and Tenn. where it seems to do best under the mountain climate where the stringless sorts seem to ripen or "set tough" easily. Pods very long. Seed brown.

WAX OR YELLOW PODDED SORTS:

Pencil Pod Black Wax. Pkt. 25c; lb. 55c; 5 lbs. \$2.25
52 days. The most popular of the round podded wax varieties; always a sure bearer, pods 5 1/2-6 inches long and of the very best quality; good for freezing, too. Seed black.

Saier's Golden Wax. Pkt. 25c; lb. 55c; 5 lbs. \$2.25
52 days. The most popular flat podded wax variety; pods flat, 5 inches long, stringless, of good quality, rust proof.

BEANS. Pole or Stick Sorts.

The pole beans require supports for the best crop; grown mainly in the South where the seasons are longer. Pods generally are more fleshy than the bush types and can be used in a much more advance stage. Plant in hills, 2-3 seeds per hill, usually 3 feet apart and on three stakes, the tops being tied together for supports. Packet will plant 100 hills, or 150 foot row; bushel per acre.

Kentucky Wonder. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
65 days. This is the most popular variety of the pole beans; pods 7-9 inches, round, meaty and excellent for freezing as well as for all other uses; stringless when young. Seed tan. Also called Old Homestead.

Missouri Wonder. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
65 days. Very productive late variety, pods 5 inches long, flat, tough and stringy but a very popular variety in the South. Seed light flesh, peppered brown. Also called Noxall.

Laxy Wife. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
72 days. A late productive sort with 5-6 inch pods, flat, stringless, very fleshy, brittle, attractive and excellent quality, very popular, seed round and white.

London Horticultural. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
70 days. Also known as October Bean. Hardy, productive, pods 5-6 inches long, flat, stringless, good quality; it is used very much as a green shell bean, but good also for snap or dry shell beans. A Cranberry bean; seed white or light tan streaked with red.

McCaslan. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
70 days. A prolific white seeded sort, one of the most popular Southern sorts; pods stringless, meaty and excellent quality.

Red Speckled Cut Short. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
75 days. Called Corn-hill Bean. Hardy, late, productive, pods 3 1/2-4 inches long, flat, stringy, fair quality, good for a corn hill bean. Seed small, white splashed red.

Scarlet Runner. Pkt. 25c; lb. 60c; 5 lbs. \$2.50
65 days. Can be used like a lima bean and while grown mostly for its pretty scarlet flowers which are very ornamental, the pods make excellent green shelled beans; 6-8 inches long. Suitable for growing on corn as well as poles.

Tennessee Wonder. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
70 days. Also called Egg Harbor. Similar in habit to Kentucky Wonder but with immensely larger, straighter, smoother and more crease-backed pods; 8-9 inches long, tinged purple, slightly stringy and suitable best for green shelled beans rather than for snap beans.

Striped Creaseback. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
72 days. Also called Nancy Davis and Scotia. A very hardy and productive cornfield bean, pods round, 6 1/2-7 inches long, crease-backed, slightly stringy, very fleshy, good quality. Seed olive green with dark stripe.

White Creaseback. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
63 days. A very hardy, very early, round podded sort, 5-6 inch pods, slightly stringy, brittle and fine grained; quality fair, very popular white seeded sort.

White Kentucky Wonder. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
64 days. Also called Burger's Green Pod. Very high quality white seeded sort of German origin, pods 6-7 inches long, flat, very tender, fleshy and stringless, foliage distinctively dark green and much crumpled.

Wax Kentucky Wonder. Pkt. 25c; lb. 60c; 5 lbs. \$3.00
70 days. The pods are yellow or wax, 7-8 inches long, flat, decidedly crease-backed, very fleshy, brittle but stringy, attractive, quality fair.

LIMA BEANS.

Limas are easily grown in any rich well drained loam; pole sorts require stakes or supports but the bush sorts can be grown same as the regular bush beans, except giving them a little more room in the row. Be sure seed is in moist soil when planting; when possible you can plant the seed with the eye down, for better germination. Plant only when the soil is warm and after all danger of frost is passed. The beans are used in the green state or they can be left for dry beans. The seed being very large, it requires from 2-3 times more seed per given space than for the regular bush beans. 2 bushels per acre.

Fordhook Bush. Pkt. 25c; lb. 50c; 5 lbs. \$2.30
75 days. Exceedingly popular, especially as a market sort; best quality, productive, pods 5 inches long, 4-5 beans per pod, good flavor.

Improved Bush. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
75 days. An improved type of the old Burpee Lima, with larger beans and pods, containing 6 thicker beans per pod. A popular garden variety.

Henderson Bush. Pkt. 25c; lb. 50c; 5 lbs. \$2.20
66 days. A vigorous, hardy, very early, small seeded type much in favor as a canner; good quality and a favorite in the North on account of its earliness. The seeds are about half the size of the other Limas.

King of the Garden. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
88 days. The best pole Lima, an improved strain of the Large White; 3-4 large beans per pod, vigorous and productive. Requires supports for best growth.

DRY SHELL BEANS.

These are grown the same as the dwarf bush snap beans but their value is only in their being of use as dry winter beans. Harvest when the pods have dried, cure for a spell and then thresh the seed from the pods and store for winter use.

Michilite Navy Bean. Pkt. 25c; lb. 50c; 5 lbs. \$2.00
90 days. The best of the navy bean varieties, early, productive and of the best quality. Bushel seed per acre required.

Red Kidney. Pkt. 25c; lb. 50c; 5 lbs. \$2.25
95 days. Light red type. Seed is nearly as large as a lima. They make the best of dry winter beans.

BEEFS, TABLE.

Table Beets can be sown as early in the spring as the ground can be worked and other sowings can be made at intervals into July, especially if wanted for beet greens and very young beets. Sow seed in rows, 18 inches apart, covering the seed about 1/2 inch deep. Do not sow too thickly. When the seedlings are up, thin from 1-4 inches apart, depending upon whether you want them for greens, young roots or winter roots. For winter use plant so as to mature just before frost for best quality roots. Oz. plants 50 ft.; 5 lbs. per acre.

Early Blood Turnip. Pkt. 5c; oz. 20c; lb. \$1.50
56 days. Excellent for both home or market gardening and can be used for

greens or small bunching beets; it is productive and hardy and does well under adverse conditions.

Detroit Dark Red. Pkt. 5c; oz. 20c; lb. \$1.60
68 days. One of the very best for home gardening or canning. Roots globe shaped, dark red, small tops and especially free from zones.

Crosby's Egyptian. Pkt. 5c; oz. 20c; lb. \$1.60
55 days. Usually grown for the early crop, roots flattened globe-shaped, fairly dark red, small tops. Popular sort.

Early Wonder. Pkt. 5c; oz. 20c; lb. \$1.60
55 days. Green top strain. Best bright green topped winter shipping beet; is preferred above all other types for the winter shipping beet grown in the South.

Early Wonder Tall Top Strain. Pkt. 5c; oz. 25c; lb. \$1.80; 5 lbs. \$7.50
55 days. A very popular variety producing uniform roots and large bright green tops, especially desirable for those producing button beets and greens for the early spring market.

CHARD, SWISS.

Grow Chards same as you do Beets. The tops can be cut off when tender and a new growth will come on if the soil is rich and growing conditions favorable. It also makes excellent feed for young poultry or baby calves during the hot summer months.

Fordhook Giant. Pkt. 5c; oz. 15c; lb. \$1.20
Leaves dark green, crumpled, savoy-leaved, with broad white mid-rib.

BRUSSEL SPROUTS.

Long Island Improved. Pkt. 10c; oz. 50c; lb. \$4.30

BROCCOLI.

Sow seed indoors or in cold frame same as for early cabbage setting them out in the garden about May 1st. Set plants about 18 inches apart in 2 1/2 foot rows. They do best in the cooler parts of the season. Oz. seed produces 2000 plants.

Italian Green Sprouting. Pkt. 10c; oz. 35c; lb. \$3.10
55-60 days. From transplanted plants to first cutting. The heads are much like Cauliflower and it is used much in the same way. It is excellent frozen. It should be in every garden and is much easier grown than Cauliflower. Grow same as you would late Cabbage.

CABBAGE—Earliest Heading.

Cabbage should be started indoors or in cold frame for the early market, but for winter, they should be started outdoors later, from May 20th to June 1st. They grow best in the cool fall weather. For early crop start them about March 15th, transplanting the seedlings into flats and hardening them off promptly as warm weather comes, and transplant to the field May 1st. Plants should be spaced 18-24 inches in the row, according to the size of the variety and in rows 30 inches apart. The soil should be rich for best results. Days given are from transplanting to maturity, allow 30 more days from the planting of the seed. Winter cabbage should be set out not later than July 15th. Where the Yellows affect Cabbage, plant the Yellow Resistant varieties, but if not troubled in this, it is best to plant the regular strains. Oz. produces 2000 plants.

Early Jersey Wakefield. Pkt. 10c; oz. 45c; lb. \$2.40
65 days. The most widely grown extra early pointed head variety; heads solid and should be grown for the early crop.

Early Flat Dutch. Pkt. 10c; oz. 45c; lb. \$2.40
80 days. An excellent medium early short stemmed variety with large flat heads. This makes a good variety in the South where large heads are wanted.

Copenhagen Market. Pkt. 10c; oz. 40c; lb. \$3.10
68 days. A good medium early variety with medium large round heads, solid and uniform; a popular market sort.

Golden Acre. Pkt. 10c; oz. 45c; lb. \$3.60
62 days. An extra early selection from Copenhagen Market; small and compact plants, excellent quality; of special value for early market.

Allhead Select. Pkt. 10c; oz. 50c; lb. \$4.35
75 days. An ideal second early Cabbage, round heads weighing 6-8 lbs. and of excellent quality both for summer and winter use.

CABBAGE—Second Early.

Glory of Enkhuisen. Pkt. 10c; oz. 35c; lb. \$2.95
78 days. Large globe-shaped second early Cabbage with excellent keeping qualities; heads weigh 6-8 lbs.

CABBAGE—Late or Winter.

Danish Ballhead. Pkt. 10c; oz. 40c; lb. \$3.20
120 days. The leading late tall stem variety in most sections of the country; heads solid, round, 10-12 lbs. each and the best of winter keepers.

Premium Late Flat Dutch. Pkt. 10c; oz. 35c; lb. \$2.85
110 days. A very popular late flat head variety, heads flat, large 10 lbs. or more; especially liked in the South.

Mammoth Red Rock. Pkt. 10c; oz. 45c; lb. \$3.75

YELLOW RESISTANT CABBAGE.

Where the soil is infected with the "Yellows" disease, the resistant varieties should always be planted, but if you soil is not infected it is best to use the regular strains.

Marion Market (Yellow Res.) Pkt. 10c; oz. 50c; lb. \$4.10
75 days. Marion Market is a selection from Copenhagen Market but a little larger and later; heads round and of excellent quality.

Early Flat Dutch (Yel. Res.) Pkt. 10c; oz. 45c; lb. \$3.60
80 days. Similar to the popular Early Flat Dutch strain and an excellent kraut variety; heads 6 lbs. each.

Wis. Hollander (Yel. Res.) Pkt. 10c; oz. 50c; lb. \$4.10
105 days. A Yellow Resistant strain from Danish Ballhead; heads round and solid; best resistant winter variety.

Wisconsin All Season (Yel. Res.) Pkt. 10c; oz. 45c; lb. \$3.60
92 days. A splendid late or winter variety, heads rather flat, 9-10 lbs.

CABBAGE, CHINESE OR CELERY.

Chinese Cabbage is a fine vegetable either cooked like Cabbage or used as a salad. A heavy yielder and rich in food value. Sow seed during July or August as it grows best during the cool fall months. Oz. will sow a 200 ft. row.

Chihili. Pkt. 10c; oz. 30c; lb. \$2.00
70 days. Chihili, a most popular variety and very dependable heading sort; heads 18-20 inches in length, 3-4 inches thick at base.

CARROT.

Carrots can be sown early in the spring and again every two weeks for a continuous crop for young bunching roots; for winter crop, best to sow in July. Best in a deep mellow soil. Sow seeds about 1/2 in. deep with a few Radish seed mixed in to mark the rows for early cultivation as Carrots do not germinate readily. Rows can be 12 inches apart and the roots should be thinned to 3 in. apart in the row; for young roots seed can be sown as late as Aug. 15th. Oz. plants a 125 ft. row.

Chanteney. Pkt. 10c; oz. 25c; lb. \$2.00
70 days. A fine large thick stump rooted sort, orange skin and fine quality. It is good for all purposes and especially for winter use.

Danver Half Long. Pkt. 10c; oz. 25c; lb. \$2.00
75 days. Probably grown more extensively than any other variety, skin rich orange-red color, root 7 in. long, tapering to a blunt point. It is of the best quality and especially good for winter use.

Scarlet Nantes. Pkt. 10c; oz. 30c; lb. \$2.30
68 days. A valuable stump rooted variety, with the root rather even in thickness for its entire length; it is especially valuable for bunch Carrots as well as for all other uses.

CAULIFLOWER.

For an early crop sow the seed in hot bed or greenhouse during January or February; for fall crop, start in the open same as for Cabbage. Maturity dates are from transplanting, add 30 days from seed sowing. Oz. produces 1500 plants.

Early Snowball. Pkt. 10c; lb. \$2.40
85 days. An improved Dwarf Erfurt, producing snowy white heads; early and of the best quality, extensively grown everywhere; outer leaves erect.

CELERY.

For early Celery start seed indoors in February and for late crop about April 1st. When seedlings are 4 inches tall, cut back about 1 inch and transplant to rows 3 ft. apart and plants 6 inches apart in the row. Seed can be sown about 1/2 inch deep. Add about 55 days to maturity dates when figuring from planting seed.

Golden Self Blanching. Pkt. 10c; oz. 70c; lb. \$6.00
115 days. Medium sized stocky plants with thick solid crisp stalks and compact golden yellow hearts; an exceptionally fine flavor.

CUCUMBERS.

For real early Cucumbers seed can be planted in berry boxes about April 1st and transplanted to field when frost danger is passed. For regular crop plant about June 15th, 1/2-1 inch deep, in hills 4-6 feet apart. Fruits should be picked as soon as ready. Cucumbers will not stand any frost. Oz. plants 100 feet.

Chicago Pickling. Pkt. 5c; oz. 20c; lb. \$1.90
55 days. Still the best pickling Cucumber regardless of all the new varieties or new names. Our strain is early, prolific, uniform and perfect pickling type. Black spine. It is also of value as a slicer for the home garden.

Early Fortune. Pkt. 5c; oz. 20c; lb. \$1.90
65 days. Fruits 8-9 inches long blunt at both ends and an excellent slicer and especially of value for dill pickles, its shape being perfect for this use. Good for the market, too. White Spine.

Early Green Cluster. Pkt. 5c; oz. 20c; lb. \$1.85
55 days. Similar to Chicago Pickling, but a little smaller. Is very popular for home gardening. The fruits form in clusters more than other varieties. Black spine.

Early White Spine. Pkt. 5c; oz. 25c; lb. \$2.00
60 days. An excellent medium sized Cucumber, producing early and abundantly; fruits slender and dark green, flesh solid white.

Improved Long Green. Pkt. 10c; oz. 30c; lb. \$2.50
75 days. Our strain of this valuable variety is of the very best; fruits are dark green, long and tapering at both ends, 12-14 inches long. Being black spined it can also be used for pickles for the home garden as well as the most valuable slicer.

(See VEGETABLES, Page 19)

In The Mail

(Continued from Page 1)

your favorites to friends who are likewise interested. But what we want to especially mention is that not all of these specialty clubs co-operate outside of their own circle, and that may not be the best policy. The American Penstemon Society is the most outstanding exception to this and thru their efforts, partly, we have listed the most complete Penstemon classification to be found anywhere, with the result that hundreds of new Penstemon enthusiasts are added in this way and their favorite flower thus becoming better known not only here, but all over the world.

Mrs. Nellie M. Snyder of Cooperstown, N. Y. is very interested in a rock garden plant with "leaves that look like Dusty Miller but has a beautiful white blossom, quite late and borne on long stems and looks like small white daisies, 1 ft. tall." This can be a number of things but probably an Achillea, possibly serbica or A. clavennae. Sorry we do not have either at this time.

"We surely enjoy your new type catalog," writes Mrs. A. S. Rothernel of Akron, Ohio, "and will look forward to the next issue," and in the same mail, Mrs. H. Y. Weeks of Troutville, Va., writes, "Your Saier Catalog of rare and popular seeds is the most comprehensive list of its kind I have ever seen."

Dr. Edgar T. Wherry of the University of Penn. botanical Department and who has been so kind in giving us information whenever we have written him, takes time off just as he starts on a three month trip in the West, to say, regarding the pronunciation of Penstemon, in last month's issue. "This has been pronounced Pen-STE-mon for 200 years, since Mitchell named it in the 1740's. You will find it so accented in such scholarly works as Bailey's Hortus Second p. 545. The leading botanists of the country including Keck and Pennell, monographers of the genus, so pronounce it. For some mysterious reason, the editors of Standardized Plant Names, Ed. 2, 1942 changed this standard pronunciation to accent on the first syllable."

The American Penstemon Society is using the pronunciation PENS-stee-mon, mainly because it sounds easier if not better, but as the botanists are strict as to the original names and for a good reason too, it might be best to use the original pronunciation, when printing it and leave the transgression to those who wish the accent on the "PENS."

Mrs. A. Hougardy asks about several plants. Microsperma is also Eucnide, a group of stinging plants hardly suitable for gardens, in spite of its beautiful flowers. Dr. Worth attempted to collect E. urens last summer but no good seed turned out. However, some Eucnides have been classed as Mentzelia and we recommend M. lidleyi, which we list. One thing about our catalog and that is if you read about something, you can get the seed for it. Haven't you read about some wonderful flower and become all worked up to planting it and then not being able to find seed for it? We will try not to let you down in this way.

Joe Elias of Philadelphia, writes, "I found your seed list both fascinating and helpful. Some variety too."

Mrs. Ruth M. Hadley, North Platte, Nebr., wants Campanula isophylla. We have not known any seed source for this, however, we will write to one of our correspondents in Germany as we believe one of the German growers did have this before the war. The blue one is rare.

Geo. Seldes, Norwalk, Conn., asks some questions which are delayed. Always write questions on a separate sheet of paper, not on your order, because the orders are always kept together and thus the questions sometimes gets overlooked. He asks, "what is meant by planting seeds in early spring, when ground is cool. Does this mean March or April here, when there is still danger of frost? Could such seeds be planted now (See IN THE MAIL, Page 21)

VEGETABLE SEEDS

White Wonder.Pkt. 10c; oz. 30c; lb. \$2.40

70 days. A blocky white skinned variety, that makes an attractive slicing cucumber. It is generally grown all over the country but in limited amounts; strictly a home garden sort.

DILL

Long Island Mammoth.Pkt. 10c; oz. 20c; lb. \$2.00

(Anethum graveolens). Annual herb with feathery foliage, growing 4-6 ft. tall producing an abundance of aromatic seed which are used in pickles, preserves, soups and sauces.

ENDIVE.

Sow during March or April in hot bed or cold frame covering seed about 1/2 inch, transplanting in the field in April or May, spacing plants 12 inches apart; for late crop sow in June or July. Oz. produces 3000 plants. Plants can be tied up when full grown so as to blanch the inner leaves, this requires 3-4 weeks.

Green CurledPkt. 10c; oz. 20c; lb. \$1.40

Best for general use; season 95 days. It can be easily blanched.

EGG PLANT.

Sow seed in hot bed or greenhouse in March or April and transplant when an inch high. Transplant to the open when weather is warm; they do not stand frost. Space about 3 ft. each way; allow 8-10 weeks for the production of plants before setting out time. Oz. for 1000 plants.

Black BeautyPkt. 10c; oz. 90c; lb. \$6.60

80 days from setting out. Beautiful rich purple black fruits of the best quality. This is probably the best all around variety; is a vigorous grower.

KALE.

Kale or Borecole for early use should be sown early in the spring, for late fall or winter use, sow the seed in June and transplant in July to rows 2 ft. apart and plants 2 ft. apart. Seed should be sown 1/2 inch deep; cultivate same as Cabbage. Oz. produces 2000 plants or 150 ft. of drill.

Dwarf Scotch Curled.Pkt. 5c; oz. 20c; lb. \$2.00

60 days. Leaves are very large and deeply curled and fringed and of desirable rich bluish-green color; plants dwarf, even growth with leaves hugging the ground, which will not be broken off by heavy wet snows.

SiberianPkt. 5c; oz. 20c; lb. \$1.40

65 days. Green, curly leaves, tender and of delicate flavor; is especially good for late fall and winter growth.

LETTUCE, Leaf or Loosehead.

Lettuce should be sown early in the spring as soon as the soil is ready to work and followed every 2 weeks by other sowings so as to keep a continuous crop of fresh, tender leaves. For fall crop, sow in July. The heading types can be started indoors or in cold frame about February, transplanting the seedlings to the open ground as soon as possible. In fact you will have better results with head lettuce, even when started outdoors, by transplanting them. Seed should not be sown over 1/4 inch deep and a few radish with the seed will mark the rows quickly so that cultivating can be made if the ground becomes hard before lettuce is up. Pkt. will plant 50 ft. or more; oz. 500 ft.

Black Seeded SimpsonPkt. 5c; oz. 20c; lb. \$1.65

45 days. The most popular loose leaf lettuce, producing a compact mass of crumpled light yellowish green leaves of the very best quality.

Early Curled SimpsonPkt. 5c; oz. 20c; lb. \$1.80

45 days. White seeded; forms close masses of light green crumpled leaves, brittle and of best flavor; and a good variety for forcing under glass.

PrizeheadPkt. 5c; oz. 20c; lb. \$1.45

45 days. A very high class loose leaf lettuce with growth similar to B. S. Simpson but with a reddish tinge to all the leaves, giving it an attractive appearance.

Grand RapidsPkt. 5c; oz. 20c; lb. \$1.80

42 days. White seeded; quick maturing, large loose heads, upright growth and showy; leaves bright green crimped at edges. Best quality.

LETTUCE, Heading Varieties.

BibbPkt. 5c; oz. 30c; lb. \$2.75

78 days. A very popular variety forming a solid heart of rich yellowish green; this is good for cool seasons only. It is of very good quality.

MANGELS.

Mangels are the most important root crop for stock feeding, forming the very best food for cattle, hogs or poultry and at little cost. 50 tons can be grown per acre and the feed value is near to that of grain with the added value of a succulent food during the winter. Sow them early in the spring, in rows 2-2 1/2 feet apart, thinning the plants to at least 6 inches apart as soon as they are 2 inches high. 6-8 lbs. of seed required per acre.

Mammoth Long RedPkt. 5c; oz. 20c; lb. \$1.25

110 days. The most popular variety, easily grown and harvested; the roots are red, flesh white; smooth and grows well out of the ground making it easy to pull.

MUSKMELON.

Muskmelons grow best in a light soil, planting them so that the seedlings will not be touched by any frost; plant either in rows 6 ft. apart with the seeds every foot, or they can be planted in hills 8 ft. apart each way so as to be able to cultivate both ways. Thin plants in the row to 2 plants per hill or in the hill system, to 4-5 plants per hill. Plant seeds 1/2 inch deep. Oz. plants 60 hills; 2-3 lbs. per acre.

Banana.Pkt. 10c; oz. 25c; lb. \$2.50

98 days. Fruits 18 inches long by 4 inches in diameter, smooth gray-green to lemon color with the flesh salmon.

Golden ChamplainPkt. 10c; oz. 30c; lb. \$2.50

82 days. Also known as Lake Champlain, the earliest melon, almost round, 6 inches across, 5 1/2 deep, moderately netted, deeply ribbed; flesh sweet, golden orange; productive and on account of its earliness is especially good for early market and home gardens.

Hale's Best, No. 36Pkt. 10c; oz. 25c; lb. \$2.10

86 days. Early salmon flesh melon, well ribbed and netted skin; flavor especially sweet and with a somewhat musky tank. Fruits almost round and especially right for crating.

Hearts of GoldPkt. 10c; oz. 30c; lb. \$2.10

80 days. Nearly round, 4-5 inches thru, deep orange flesh, closely netted and of the very best flavor.

Honey RockPkt. 10c; oz. 30c; lb. \$2.10

85 days. Skin gray-green covered with sparse coarse netting; flesh orange salmon, green rind beneath the skin. Best market melon and of high quality, productive.

New YorkerPkt. 10c; oz. 30c; lb. \$2.25

90 days. This variety is especially a valuable variety for road-side market; rind is extremely strong or hard covered with a heavy rope-like netting, which stands out and more prominent than in any other variety. Skin is slate gray until maturity, then turning to lemon yellow; the thick brilliant flesh is very attractive with sugar content above, even, the Hales Best types, with a soft delicious texture and highest edible qualities.

Rockford No. 45Pkt. 10c; oz. 30c; lb. \$2.10

90 days. Almost round, with heavy netting, flesh green and of a distinctive flavor.

Tip TopPkt. 10c; oz. 30c; lb. \$2.10

95 days. 7 inches long and 6 1/2 thru, deeply ribbed with thick deep salmon flesh of spicy flavor; skin smooth, slate turning to, yellowish when ripe.

MUSTARD GREENS.

Mustard can be sown early in the spring with successive sowings every 2-3 weeks during the cool parts of the season. Sow thinly in rows 1 1/2 ft. apart, covering seeds about 1/4 inch. Oz. will plant 100 ft.

Florida BroadleafPkt. 5c; oz. 15c; lb. \$1.20

43 days. Large, upright, leaves very large and thick; bright green, smooth, pale green mid-rib. Desirable because of the ease in preparing the smooth leaves.

Fordhook FancyPkt. 5c; oz. 15c; lb. \$1.20

40 days. Dark green, deeply curled and fringed; flavor mild and especially good for greens or salads; stands a long time before bolting to seed.

Southern Giant CurledPkt. 5c; oz. 15c; lb. \$1.20

35 days. Very popular curled leaf mustard for spring or fall planting; leaves are bright green, pleasing mild flavor. Leaves large, fringed and curled at margins.

TendergreenPkt. 5c; oz. 15c; lb. \$1.05

28 days. A rapid growing mustard having large broad thick dark green leaves, which, when cooked has a mild spinach flavor; a heavy cropper and resistant to heat and cold.

OKRA.

Okra is a valuable vegetable, used when the pods are young; it is also fine for cutting up in soups, stews, catsup and other relishes. Sow when the soil is warmed up as they will not stand any frost, in rows 24 inches apart, thinning to 6-8 inches, cover seed about 1/2 inch.

Perkin's MammothPkt. 5c; oz. 15c; lb. 85c

68 days. Dark green, pods fleshy and tender, tapered and ribbed, 4 1/2 ft. tall; Very popular.

ONION.

Winter Onions are sown early in the spring, in rows about 18 in. apart and when seedlings are 3-4 in. tall they should be thinned to 2-4 inches apart in the row. The Southport Globes and Prizetaker can be started indoors in February and transplanted to the open ground as soon as soil is in condition, when bulbs of immense size can be grown. It is a good point to add a few radish seed when planting so that the row will be marked quickly for cultivation and before the onions have germinated; in a heavy wet spell, it may save your crop. Oz. plants 100 ft., 5-6 lbs. required per acre.

Southport Red GlobePkt. 10c; oz. 55c; lb. \$4.60

110 days. Bulbs globe shaped with small neck, deep red skin and white flesh, good keeper.

Southport White GlobePkt. 10c; oz. 60c; lb. \$5.10

110 days. Medium large bulbs, skin thin but reasonably good keeper. Skin

is white, bulb globe type. The white sorts are hotter than the yellows.

Southport Yellow GlobePkt. 10c; oz. 50c; lb. \$4.20

110 days. Bulbs globe shaped, yellow skin and the best long keeper. It is very popular both for market and the home garden.

PARSLEY.

Every garden should have Parsley; does well in both sun or shade and very easily grown; used for greens or can be dried and kept in an air tight bottle for use in soups during the winter. It is high in food value. Plant early in April in rows 1 ft. apart, cover seed 1/4 in. Pkt. plants 25 ft.; oz. 300 ft.

Champion Moss CurledPkt. 5c; oz. 15c; lb. \$1.30

70 days. Compact dark green plant, exceedingly fine cut and dense.

PARSNIP.

Sow seed very early in the spring in rows 2-3 ft. apart, covering 1/2 inch deep, thin seedlings to 3-5 inches apart. Roots may be stored during the winter or left out in the ground for early digging in the spring. A frost improves the flavor. Parsnips make a delicious vegetable. Oz. will sow 100 ft.

Hollow CrownPkt. 5c; oz. 20c; lb. \$2.20

95 days. Roots 10-12 inches long, 2 1/2-3 across at top, hollow crowned and tapering; this is the most popular variety both for market or home gardening.

PEPPERS.

Sow seed of Peppers indoors, allowing 8-10 weeks to produce plants suitable to set out, when the weather becomes warm as they do not stand any frost. Space plants 18-24 in. in rows, rows 2-3 ft. apart. They do best in a moderately rich light soil. Maturity days under each variety are from transplanting to fruiting, add 8-10 weeks from the planting of the seed.

Peppers are all green when first formed, later turning red when ripe; they should be picked often when green for a better yield. The Sweet Peppers are used for slicing, salads or for stuffing. The hot kinds are used for sauces, flavoring and pickling, either fresh or dried. Pkt. will produce 100 plants; oz. 1500.

Bull NosePkt. 10c; oz. 70c; lb. \$6.00

70 days. Also called Bell, medium hot variety, fruits 3 by 2 1/2 inches, blunt, largely 4-lobed, deep green changing to scarlet.

California WonderPkt. 10c; oz. 55c; lb. \$9.00

75 days. Sweet, plant vigorous, fruits 4 1/2 by 3 1/2 inches. 4-lobed upright, deep green changing to scarlet. Very popular thick fleshed variety.

PimentoPkt. 10c; oz. 70c; lb. \$6.00

73 days. Sweet, erect plant, prolific, fruits 3 1/2 by 2 1/2 inches, top shaped, dark green turning to bright crimson; a very popular sweet variety and grown in large quantities.

Ruby KingPkt. 10c; oz. 85c; lb. \$7.50

68 days. Sweet, erect, prolific, fruits 5 by 3 inches, 3-lobed tapering, dark green turning to deep red. A fine variety.

Short Red ChiliPkt. 10c; oz. 70c; lb. \$5.50

82 days. Plant low and spreading, productive, fruits erect, conical and very hot; color light green changing to bright red; used for making pepper sauce.

PUMPKINS.

Plant Pumpkins at corn planting time, so that they will not be touched by any frost. Plant in hills 6-8 ft. each way if you wish to cultivate both ways or they can be planted in 8 ft. rows, growing 2-3 plants every 3-4 feet. Cover seed 1 inch. Pkt. will plant about 5 hills, oz. 25 hills.

Connecticut FieldPkt. 5c; oz. 15c; lb. \$1.25

110 days. Fruits 12 by 14 inches, hard, smooth, ribbed, deep orange, flesh yellow; A very popular variety especially in the corn belt and a large producer.

Green Striped CushawPkt. 5c; oz. 15c; lb. \$1.25

110 days. Fruits 20 inches long, 10 thru large part with a tapering crooked neck ending in a ball. Color light green with white striping intermingled. This is very popular in the Ohio Valley and southwards, a large yielder.

Large CheesePkt. 5c; oz. 15c; lb. \$1.25

110 days. Fruits are 6 by 12 inches, flat, ribbed, cream color, flesh deep orange. This is a popular canning and pie variety.

Small Sugar or PiePkt. 5c; oz. 20c; lb. \$1.45

110 days. Fruits are 8 by 10 inches, skin hard, smooth, ribbed, thick flesh, deep yellow. This is the best all around variety and especially for the home garden where they are wanted for pies.

RADISH.

Radishes can be sown the first in the spring and should be followed every 10-15 days by other plantings so as to have fresh, tender roots at all times. The small globe varieties are best for early planting, but for summer growth the longer types are better. The Winter Radishes are excellent and should be tried in every garden; requiring a cool season for their growth, they should be planted in early summer for fall use or mid-summer for late fall; thin these to 3 inches apart. Pkt. will sow 20 ft.; oz. 100 ft.

Crimson GiantsPkt. 5c; oz. 15c; lb. \$1.00

28 days. Large globular roots 1 1/2 in. thru, bright crimson color and remaining tender for a good period.

French BreakfastPkt. 5c; oz. 15c; lb. \$1.20

25 days. Roots oblong, thick at bottom, 1 1/2 by 3/4 inches, blunt, scarlet with white tip, flesh white, will not stand after maturity.

Long Black SpanishPkt. 5c; oz. 15c; lb. \$1.05

58 days. Roots 7 inches long and 2 thru, skin black, flesh white, and one of the best winter type Radishes.

Scarlet GlobePkt. 5c; oz. 15c; lb. \$1.00

23 days. Medium top, roots round to olive, bright scarlet, tops about 4 inches tall; best type for early planting.

Scarlet Turnip White TipPkt. 5c; oz. 15c; lb. \$1.00

26 days. Also called Sparkler. Roots ball shaped, scarlet with the tip white, flesh white. A very popular variety, for all uses.

White IciclePkt. 5c; oz. 15c; lb. 90c

27 days. Roots 5 1/2 inches long tapering to a point; is the best for summer growing and will stand a reasonably long time. Skin and flesh white.

RTA BAGA.

Rutabagas or Swede Turnips require a longer season than turnips and should be grown as a fall crop; sow seeds from early to mid-summer in rows 1 1/2-2 ft. apart, covering seed 1/2 inch and thinning to stand 6-8 inches apart in the row. Pkt. will sow 50 ft.; oz. 250 ft.

American Purple TopPkt. 5c; oz. 15c; lb. 80c

90 days. Roots 5 inches thru, top-shaped with small neck, skin yellow with purple top, flesh light yellow. The most popular variety.

SALSIFY or OYSTER PLANT.

Salsify is so easily grown and such a delicious vegetable that it should be in every garden. Sow the seed in rows 1 1/2 ft. apart, very early in the spring, covering the seed about 1/2-1 inch deep and when seedlings are 2 in. high thin to stand 4-5 inches apart. The roots can be used late in the fall, stored for winter use or they can be left in the ground over winter and dug real early in the spring. Delicious when used in soups, pancakes, fritters, diced or mashed or fried same as Parsnips. The flavor is much like that of oysters. Pkt. will sow 20 ft.; oz. 100 ft.

Sandwich Island MammothPkt. 10c; oz. 75c; lb. \$7.00

120 days. Smooth thick roots 9 inches long with shoulder 1-1 1/2 in. diameter, flesh white and of the very best quality.

SPINACH.

Spinach is one of the very best greens and should be in every garden. It is also excellent for quick freezing. It grows best in the cool part of the season, early spring or late fall. Sow seed very early, either broadcast or in rows, 18-24 in. apart, covering seeds 1 inch, and thin plants to 5-6 inches apart. Make additional plantings every 10-14 days till June; for fall use plant again in August and where the winters are mild, sow in the fall and cover with a few inches of hay or straw for very early spring crop. Pkt. plants 25 ft.; oz. 75 ft.

Bloomdale SavoyPkt. 5c; oz. 15c; lb. 50c

48 days. A quick growing hardy Spinach and one of the most popular for home and market. Glossy green leaves, much crinkled and very heavy texture. Valuable for spring or fall planting.

King of DenmarkPkt. 5c; oz. 15c; lb. 50c

46 days. Medium smooth, broad, dark green variety, leaves slightly crumpled, exceptionally long standing.

SQUASH—Summer Varieties.

All Squash should be planted when danger of frost is over and weather is warm, usually planted in hills 6-8 feet apart each way, leaving 3-5 seedlings per hill. The summer varieties require less space than the winter types. The summer varieties are used when immature, usually when very small, and especially the White Bush Scallop. The bush varieties require less space in the garden and can be planted 4 ft. apart. Oz. will plant 50 hills. The winter varieties require a fertile soil and an oz. will plant 30 hills.

Early Summer CrookneckPkt. 5c; oz. 20c; lb. \$1.45

52 days. Very popular variety, fruits 10 x 4 inches.

Early White Bush ScallopedPkt. 5c; oz. 20c; lb. \$1.35

50 days. The "White Patty Pan" or Cymling; skin creamy white, very good; use when real small.

SQUASH—Summer and Winter.

Acorn or Table QueenPkt. 10c; oz. 20c; lb. \$1.45

58 days. Also called Table Queen; very dark green skin, 6-7 in. long and 4 in. in diameter. Flesh orange and a very good squash for fall and early winter use. The fruits are just right for individual servings.

SQUASH—Winter Varieties.

Blue BananaPkt. 10c; oz. 20c; lb. \$1.90

105 days. Fruits 20 in. long by 5 in. diameter, slate-gray color, flesh yellowish, thick and fine grained, excellent quality.

Blue HubbardPkt. 10c; oz. 25c; lb. \$1.85

110 days. Fruits are large, round and pointed at both ends, hard blue gray shell and excellent winter keeper and of the very best quality.

Golden DeliciousPkt. 10c; oz. 25c; lb. \$2.10

102 days. Fruits 11 x 8 inches, top shaped, skin golden orange, flesh, orange and thick; best quality.

● Pansies

(Continued from Last Month)

Good bedding effects can be realized with the nana compacta multiflora Pansy showing a multitude of small flowers in a colorful variety. They bloom in profusion all thru spring and early summer. Similar to these is the cross with Tufted Pansies. Color Wonder, a good material for borders and rockeries, the small flowers having pretty designs and a lively color display.

In southern European countries the enthusiasm for Pansies is not as strong and in the North, the springs being too short and warm there, altho Pansies are much loved there, too.

The old "Heart's Ease" developed in the course of years, into a Pansy of amazing size and coloring, as we have them today, indicates a great amount of work and who knows what still may be developed in this lovely flower? The writer has found in the wild Pansies of the Swiss and Tyrol Alps to have a different coloring in the first blooms as compared with subsequent ones, on the same plant and the reader may form from this fact an idea as to the amount of painstaking breeding work that has given us today's beautiful Viola tricolor.

by Wolfgang Schrader

NOTE: Mr. Schrader will furnish us with the latest developments in European flower culture. He is very highly posted in flowers and their growing, all over Europe and whatever he says, may be relied upon. We may also mention that all the types and varieties mentioned above will be carried in stock in the near future. We would especially recommend the Winter Flowering Pansies, especially in those sections of the North, where they will grow to perfection and would be pleased to hear of their success so that we can especially point out the localities.

Mass Planting

The West's best color displays are it seems to me made by single species, often with quite ordinary individuals, used enmasse. Often a more attractive single specimen goes unnoticed. If this teaches us anything it is that which has often been stressed before, namely; groups, don't scatter your plants. However this assumes that you know where your plant is best suited, for unless its minium growth requirements are met it will surely die.

Whether we define a "Green thumb" as good judgment of lack of other interests, we all know that each plant does best where it is best suited but we generally don't know for sure what it finds to its likening. Most of us, rightly I think, mass the bulk of our seedlings where we think they will be best suited but scatter a few to try out other conditions.

A knowledge of the plant in its native haunt doesn't guarantee success in cultivation but will help toward the use of good judgment. Perhaps little stories about plants at home may be as helpful to you as any use I can make of the space here made available to me. I hesitate to invite questions since my experience and research time is not sufficient to insure satisfactory replies. Generalization based on a statistic is always dangerous. If at first you don't succeed, try, try, another.

—Frank Rose

CHARD FOR FEED

If you have chickens or are raising a calf, in fact any young animals, during the hot summer months, by all means plant some Swiss Chard. It can be cut for a month or two and keeps right on forming new leaves. It makes the best of green food for young animals, even baby chicks, and at so little cost and effort. Plant it just as you would beets, thin the plants in the row to 4-6 inches apart, and then just keep the weeds down. It grows rapidly and of course, makes the best of greens for the house, too. An ounce will plant a 100 ft. row; 6 lbs. an acre. Pkt. 5 cents; Oz. 15 cents; Lb. \$1.20.

(See VEGETABLES, Page 20)

VEGETABLE SEEDS

Green Watted HubbardPkt. 10c; oz. 25c; lb. \$1.85
110 days. Fruits 13 x 9 inches, pointed at each end, dark green shell, flesh orange and the very best of keepers.

TOMATOES—Red Fruited.

Tomatoes can be started in the hot-bed or indoors in shallow box, allowing 6-8 weeks to produce plants for setting out, which should be early in June, after danger from frost is passed. Transplant the seedlings when they are 2 inches high, spacing them 2 inches in flat or they can be potted into 3 inch pots. In the corn belt seed can be planted in cold frames or directly in the out-door seed bed, as early as April. Pkt. will produce 200 plants; oz. 2000. Maturity days given are field set plants to first ripe fruits; add 3-8 weeks from seed.

BeefsteedPkt. 10c; oz. 85c; lb. \$7.50
80 days. Known also as Crimson Cushion, the largest red fruited tomato, scarlet-red skin, sub-acid flavor, and a favorite with home gardeners.

Bonny BestPkt. 5c; oz. 60c; lb. \$5.20
66 days. Most popular second early sort for both home gardening or for market and canning; fruits scarlet, flattened globe shape, and a fine northern section variety.

Chalks Early JewelPkt. 10c; oz. 80c; lb. \$6.00
74 days. Fruits red, medium large, semi-globe shaped, similar to Bonny Best. 66 days. Open spreading plant, fruits flattened, medium size, red and the first early general purpose tomato.

EarlianaPkt. 10c; oz. 80c; lb. \$7.50
82 days. Large robust plant, red fruits, large and solid, weighing 7-8 oz. Is very resistant to heat and thus popular in the corn belt.

Greater BaltimorePkt. 5c; oz. 50c; lb. \$5.50
76 days. Vigorous, heavy foliage, resistant to blight fruit red, medium large, semi-globe shape, solid, the most widely used main crop tomato.

MarglobePkt. 5c; oz. 60c; lb. \$5.50
81 days. A favorite late main crop tomato; fruits deep flattened, weighing 6-7 oz. It is an old favorite for the home garden and for canning, yielding large crops.

New StonePkt. 5c; oz. 60c; lb. \$5.50
88 days. Large spreading plant, fruits pink, large flat with small seed cells. A favorite slicing sort for the home garden.

PrichardPkt. 10c; oz. 65c; lb. \$5.70
76 days. Scarlet Topper. Self topping, resistant to fusarium and nail head; fruits red with thick walls, semi-globe. Popular.

RutgersPkt. 5c; oz. 55c; lb. \$4.70
86 days. Plant large with thick stems; fruits red, globe shaped, excellent for canning, fruits ripen from the interior outwards.

Table TalkPkt. 5c; oz. 75c; lb. \$6.70
75 days. Large and globe shaped, 7-8 oz., bright scarlet and attractive; it is a very good variety for slicing, solid and good yielder.

OxheartPkt. 10c; oz. \$1.00; lb. \$10.00
90 days. Fruit heart-shaped, thick flesh, meaty, pink color and with few seeds; favorite for table use.

TOMATOES—Yellow, Orange.

JubileePkt. 10c; oz. 90c; lb. \$8.00
90 days. Deep orange flesh, thick and mild non-acid flavor. It is a very excellent variety.

Golden OxheartPkt. 10c; oz. 90c; lb. \$12.00
88 days. Fruits egg-shaped, orange in color, thick flesh and of the very best quality. This is high in vitamin C.

TOMATOES—Small Fruited.

Yellow PlumPkt. 10c; oz. 75c; lb. \$6.50
70 days. Plants dwarf but with an enormous amount of fruits about 1½ inches through; used in preserves.

TURNIPS.

Turnips are very easily grown, especially when most of their growth is made in the cool part of the fall, first even improving their flavor. Sow the Milan and foliage types in the spring as soon as the soil is in shape in rows 12-15 inches apart, thinning seedlings to 3-5 inches apart and make succession planting every two weeks. For the fall and winter crop, sow in rows or broadcast, 3 months before your first hard frost. The foliage type, main-crop, makes excellent turnip greens and is widely used. Pkt. will plant about 50 ft.; oz. 250 ft.

Purple Top Strap LeafPkt. 5c; oz. 15c; lb. 80c
46 days. White flesh, tops medium small, upright, roots flat with purple top and white below; most popular flat purple top turnip.

Purple Top White GlobePkt. 5c; oz. 15c; lb. 80c
57 days. This is the most popular turnip and probably planted 90% of the time. Flesh white, tops dark green; roots globe-shaped purple at top and white below. The best fall and winter variety.

Seven TopPkt. 5c; oz. 10c; lb. 60c
Hardy variety grown especially for its tops, for greens. Grown mainly in the South, roots not usable.

WATERMELON.

Watermelons should be planted after frost is over, a little later than corn planting time. Plant 6-8 seeds per hill and the hills 6-8 ft. apart each way if you wish to cultivate them both ways, or they can be planted in 8 ft. rows making the hills a little closer. Cover seeds ½ inch and after the seedlings are well started thin to 2-3 per hill. Rich, rather sandy soil is the ideal Watermelon patch. Pkt. will plant 6 hills; oz. 30 hills; 2 lbs. per acre. First figure in size is length, 2nd distance through.

Cole's EarlyPkt. 5c; oz. 15c; lb. \$1.35
80 days. Also called Harris Early. 18 inches long by 8½ through, flesh red, seeds black and a top rate home garden variety, especially for North.

Dixie QueenPkt. 10c; oz. 25c; lb. \$2.25
85 days. 15 by 12½ inches, skin light green alternately striped with dark green, thin rind, tough, flesh dark pink with a few white seeds; good shipper.

Early KansasPkt. 10c; oz. 25c; lb. \$2.25
85 days. Also called Russian Red, Kansas Queen. 15 by 12 inches, dark green with alternate stripes of lighter shade, flesh red with brown seeds. A favorite in the South. Fruits average 30-35 lbs. each.

Georgia RattlesnakePkt. 5c; oz. 15c; lb. \$1.35
92 days. 21 x 9 inches, light green with dark stripes, flesh pink, seed white. A favorite market melon for southern growing; fine shipper.

Ice BoxPkt. 10c; oz. 25c; lb. \$2.25
78 days. Nearly round fruits 6 inches through, dark skin with faint stripings with very thin rind and they ripen very quickly. Flesh is especially sweet, seeds black. They are especially valuable in the small garden and for use where they can be placed in the refrigerator similar to Muskmelons. Try them, they are all right.

Irish GrayPkt. 5c; oz. 20c; lb. \$1.45
90 days. 22 x 11 inches, skin tough, light gray-green, flesh dark pink, seeds white. A favorite for southern growing.

Imp. Kleckley SweetPkt. 5c; oz. 20c; lb. \$1.45
88 days. Also known as Wondermelon. 24 by 12 inches, weighing as much as 40 lbs. Skin attractive bluish green, flesh dark red, seeds white with some brown. It is tops for the home garden as well as for the market.

Klondyke No. 7 B.S.Pkt. 5c; oz. 20c; lb. \$1.60
90 days. 14 by 10 inches, dark skin, flesh thick, blood red, seeds small and black. A resistant strain.

Peerless or Ice CreamPkt. 5c; oz. 15c; lb. \$1.45
85 days. A very early medium sized melon, short oblong form. Rind light green, thin, mottled and finely veined with darker shade, flesh bright scarlet and very sweet; seeds white. One of the best varieties for the North.

Stone MountainPkt. 5c; oz. 20c; lb. \$1.45
88 days. 17 by 14 inches, dark green skin, flesh bright crimson, seeds white tipped with black. Very prolific and one of the best shipping varieties.

Tom WatsonPkt. 5c; oz. 20c; lb. \$1.45
92 days. 22 by 12 inches, rind is dark green, tough, seed brown with some mottling; grows to a very large size; flesh red and of good quality and is one of the very best shipping varieties.

FordhookPkt. 10c; oz. 30c; lb. \$2.10
95 days. Grange flesh, large oval fruits weighing 4-5 lbs. each; flesh is thick and sweet; excellent home garden variety.

Where Oz. prices are 50c or more, ½ oz. at same rate; where \$1.00 or more ¼ and ½ oz. at same rate.

SWEET CORN.

Sweet Corn for green ears can be planted as soon as the soil is warm and frost longer is passed and succession plantings can follow every week for 10 days for month at least. Plant in hills about 3 ft. apart. 4-5 seed per hill; 3 good plants per hill is about right; or they can be drilled in rows, with one stalk every foot. Three or four varieties with different maturing dates can be planted at the same time for a succession of green ears. Try to plant in blocks of 4-5 rows, rather than in one long row so as to better the pollination and thus have well filled ears. Pkt. will plant 200 hills; 8-10 lbs. per acre.

Black MexicanPkt. 25c; lb. 45c; 5 lbs. \$2.00
86 days. Ears 7-8 in. long, 8 rows of pearly white kernels in the milk stage which turn to pearly black when ripe; it is one of the sweetest and remains sweet and tender for a long time; stalks 6 ft. high.

Country GentlemanPkt. 25c; lb. 45c; 5 lbs. \$2.00
92 days. Known also as Shoe Pig; a productive mid-season sweet corn and of very high quality; ears 7-8 in. long, filled with irregularly

Early EvergreenPkt. 25c; lb. 45c; 5 lbs. \$2.00
85 days. An early white sweet corn similar to Stowell Evergreen but 2 weeks earlier; excellent quality, and should be especially planted for canning in sections where the season is short. Ears 7½ in. long, 14-20 rows, stalk 7 ft. tall.

Golden Bantam 8-rowedPkt. 25c; lb. 45c; 5 lbs. \$2.00
80 days. The most popular Sweet Corn, plants 5-7 ft. tall, ears 5½-6½ inches long, 8 rows, golden kernels of the very best quality. Our opinion is that it is a better Sweet Corn than any of the hybrids.

Golden SunshinePkt. 25c; lb. 45c; 5 lbs. \$2.00
74 days. This is an especially good variety for sections with short summers and rather cool weather; ears 7 in. long, 10-12 rows, stalks 5 ft. tall. Usually two ears per stalk; a fine home or market garden variety.

Howling MobPkt. 25c; lb. 45c; 5 lbs. \$2.00
85 days. A vigorous and productive early midseason sweet corn; stalks 5-6 ft. tall, ears 7-9 in. long, closely set with 12-18 rows of white kernels in straight rows, giving it an attractive appearance. Fine quality.

Stowell's EvergreenPkt. 25c; lb. 45c; 5 lbs. \$2.00
95 days. The most popular late white Sweet Corn, both for canning and for the home garden; ears 7½-8 inches long, 16-20 rows of deep, meaty kernels of the very best quality; 7-8 ft. tall; used very much for canning.

Adams EarlyPkt. 25c; lb. 40c; 5 lbs. \$1.80
75 days. White dent roasting corn, used mainly south of the Ohio River and throughout the South. Hardy, ears 7-8 in. long, 12-14 rows, stalk 6½ ft. tall.

Trucker's FavoritePkt. 25c; lb. 40c; 5 lbs. \$1.85
75 days. Not a sugar corn but a white roasting ear type, very much planted in the South. Ears 9-10 in. long, seed white and dented, stalk 7-8 ft. tall.

Hickory KingPkt. 25c; lb. 35c; 5 lbs. \$1.80
100 days. This is strictly a southern roasting ear corn, late large yielder, ears very large but 8-rowed. It is very extensively planted in the South.

HYBRID SWEET CORN.

The hybrid corns have a great many claims and are very popular all over the country; they seem to be more uniform, ripen more evenly and yield good. We believe, though, that the regular varieties in most cases would be equally as good if as much attention was paid to their selection and growing.

Golden Cross BantamPkt. 25c; lb. 75c; 5 lbs. \$3.30
85 days. Most widely used of the hybrids, for canning, market, freezing or home garden. Ears 7½-8½ in. long, 10-14 rows, stalk 6-7 ft. tall. Extra good quality.

Hybrid Stowell EvergreenPkt. 25c; lb. 75c; 5 lbs. \$3.50
98 days. Strong growing, white variety and a favorite for main crop canning, home or market, also freezing. Ears 7½-8½ in. long, 14-18 rows, stalk 8-10 ft.

Hybrid Country GentlemanPkt. 25c; lb. 75c; 5 lbs. \$3.50
99 days. One of the best late white varieties for canning, especially where a fine kernel is wanted. Ears 8 in. long, 14-16 rows, stalk 7-9 ft. tall.

POP CORN.

All Pop Corn can be planted closer than the regular corns, both in the row and between the rows. About 1/3 less seed is also required, due to their size. Children like to grow Pop Corn and where a small patch is planted in the garden, use a rather square plot, rather than planting in a long single row, so that pollination will be better and perfect ears thus formed.

Japanese HulllessPkt. 25c; lb. 50c; 5 lbs. \$2.00
105 days. A very popular white rice variety, popping a pure white corn. Ears 2½-4½ in. long, well filled with deep narrow kernels, stalks 6-7 ft. tall.

South American or TNTPkt. 25c; lb. 50c; 5 lbs. \$2.00
120 days. The large yellow kernel Pop Corn, popping creamy-white. A popular yellow variety. Ears 6-9 in. long, stalks 6-7 ft. tall.

GARDEN PEAS.

There is one important point in growing peas and that is they should be planted as early in the spring as possible. The wrinkled varieties are usually grown, but for the very earliest planting when danger of freezing may be had, the smooth seed varieties will stand better, where the wrinkled sorts will rot in the ground. The packets offered held about a half pound.

Early AlaskaPkt. 25c; lb. 40c; 5 lbs. \$1.90
55 days. The most popular earliest smooth seeded pea, of special value where summers are short. It is excellent for canning or for the early market. Grows 2½ ft. tall, and ripens very evenly. Pods 2¼ in. long, medium light green.

Little MarvelPkt. 25c; lb. 45c; 5 lbs. \$2.10
63 days. The outstanding early dwarf pea; grows 1½ ft. tall, pods 3 in. long with 7-8 peas; is the most popular for home, market and for freezing, being the most important winter and spring shipping pea in the South.

Improved GradusPkt. 25c; lb. 45c; 5 lbs. \$2.20
68 days. A tender sweet variety with large pods, 4 in. long filled with 8-10 peas, grows 3 ft. tall.

Alderman or TelephonePkt. 25c; lb. 45c; 5 lbs. \$2.20
74 days. This is the best variety of the tall growing peas or pole peas. Vine grows 4½-6 ft. requiring support; pods 4½-5 in. filled with 8-10 extra large peas, very productive and over a long season. We would especially recommend this variety where a small space only can be had for peas.

Dwarf Gray Sugar or Edible PodPkt. 25c; lb. 45c; 5 lbs. \$2.25
65 days. Pods are cooked like snap beans, when young, being stringless, brittle and succulent; if passed this stage, they can be shelled as the regular peas. This variety is the earliest and most popular. Pods 2½-3 in., plant grows 2-2½ ft., very prolific.

Dwarf TelephonePkt. 25c; lb. 50c; 5 lbs. \$2.20
76 days. Also called Daisy. Plant grows 2 ft. tall, pods 4½ in. long, medium light green. A stocky grower.

Laxton ProgressPkt. 25c; lb. 45c; 5 lbs. \$2.00
62 days. Also called Laxtonian and Hundredfold. Has the largest pods, 4½ in. long filled with 7-9 large dark green peas; vine grows 1½ ft. tall. This is a very high quality variety and fine for home or market as well as freezing.

Premium or Little GemPkt. 25c; lb. 50c; 5 lbs. \$2.00
64 days. Grows 22 in. tall, pods 2¼ in. long containing 6-7 peas of best quality. This has long been a popular variety for the home garden, it being early and of high quality and dwarf growing.

Thomas LaxtonPkt. 25c; lb. 50c; 5 lbs. \$2.00
65 days. Always a heavy cropper and out yielding many varieties; grows 2½ ft. tall, pods 3 in. long filled with 6-8 large tender peas of the best quality. A very popular variety.

HERB SEEDS

Before the season is over we should have at least 10 more Herbs to offer, but due to so much uncertainty in delivery to us, we are listing only those we are sure of at this time.

Prices prepaid. ½ Oz at Oz. rate; ¼ lb. 20% less than Oz. rate).

BASIL SWEETPkt. 10c; oz. 45c
(Ocimum basilicum). An easily grown tender annual, 1-ft. tall. Leaves are delightfully clove-scented and may be used either fresh or dried for seasoning soups, salads, cottage cheese, chopped meats and sausages. Space plants 6-10 inches apart, thrive in a warm light soil. Cut in bundles to dry. Plants can be potted up for winter growth indoors.

BORAGE (BUR-ah)Pkt. 10c; oz. 50c
(Borago officinalis). Attractive plant, 18-in. tall, with pretty sky-blue flowers in clusters, which are attractive to bees. The upper leaves and flowers are used in salads and the lower leaves are cooked and used like spinach. The fresh foliage has a cucumber flavor and adds a cooling touch to salads. Space plants 2-3 feet apart.

CARDONPkt. 15c; oz. 90c
(Cynara cardunculus). Grown for its branched stalks and thick main root; sow seeds early where plants are to grow, in hills 18-24 inches apart or drill in rows 3-ft. apart, thinning plants to 18-in. apart. Water in dry periods to keep leaves tender. In fall treat like Celery, and late in fall they are thus ready to eat like Celery or Endive. We offer smooth Spanish.

CHIVESPkt. 15c; oz. 90c
(Allium schoenoprasum). Perennial developing a thick grass-like tuft and valued for their mild onion-like flavor used in flavoring salads, soups, etc. The tender leaves are cut the stronger the plant will grow. Sow in drills, early, in rows 2-3 feet apart.

LAVENDER, TRUEPkt. 25c; 3 pkts. for 55c
(Lavandula spica). It is not real hardy in N. and must be protected by mulch of straw. They develop best fragrance when planted in a dry, light, friable soil and in full sun, the soil must not be too rich. Grows for ornament in the flower garden as well as for its leaves which are dried and gives off the sweet scent for which they are most valued.

MARJORAM, SWEETPkt. 15c; oz. 80c
Perennial sweet grown as an annual. The leaves are used green in summer and dried for winter. The green leaves are excellent in salads; the dried leaves are used in seasoning meats, poultry and cheeses. Seed is small and best started in seed pan and transplanted out, 12-15 inches apart. For drying gather just before they start flowering.

SAGEPkt. 15c; oz. 80c; 4 oz. \$2.00
(Salvia officinalis). Hardy perennial easily grown. The leaves are used either green or dried for seasoning meats, sausage, stuffings, and cheeses. Space 2½-3 feet apart. The dried ground leaves are very popular.

SUMMER SAVORYPkt. 15c; oz. 40c
(Satureja hortensis). Hardy annual very useful culinary herb, the aromatic leaves being used, either green or dried, for flavoring salads, sauces, stuffings, soups and stews. Start seed in pans on account of their small size, transplanting them out when ready, space 15-in. apart; thrive in good garden soil in full sun. It also is famous for its flavor with green beans, if you are a green bean eater by all means try Summer Savory.

THYMEPkt. 15c; oz. \$1.60
(Thymus vulgaris). Hardy perennial, growing to 8-in. tall with lavender flowers, grown both for ornament in border or rock garden and for its flavor. The fresh tops are used in garnishing and the leaves, either dried or fresh, chopped and used in a wide variety of cooked foods. Easily grown in ordinary garden soil, spacing them 10-12-in. apart.

WORMWOODPkt. 15c; oz. 60c
(Artemisia absinthium). The source of absinth. It is used as a flavoring and liqueur. It is perennial, and an ornamental in the border, thriving in average soil.

TOMATOES—Pink Fruited.

PonderosaPkt. 10c; oz. 90c; lb. \$9.00

Germination

(Continued from Page 1)

alpine regions before the long and rigorous mountain-winter that would destroy the small seedlings. Among these "frost-germinators" range: Aconitum, Adonis Autumnalis, Asperula, Bryonia, Colchicum, Convallaria, Gentiana, Gunnera, Helleborus, Oxalis, Primula officinalis, Trollius Violets. If sown in Spring such varieties will generally sprout but after a full year! As to the delay needed for sprouting some seeds let you wait a rather long spell, for instance Humulus (Hop) up to 4 months, likewise the Everlasting Sweet Peas—Bathyrus latifolius; Dimorphotoca, Cardiospermum, Anchusa italica, Mormodica 3 to 4 weeks. Very hard shelled seeds are to be soaked in tepid water before sowing such as Canna indica, Musa Ensete. As to the longevity of seeds one of the kinds that can get very old is the wallflower with 5 to 8 years for flower seeds according to the weather conditions during maturing of such a crop. On an average we can admit 3 years but have to consider some short-lived sorts such as Myosotis, Aquilegia, Co-bea, Coleus, Geum, Heliotrope, Impatiens, Scarlet Sage, Vinca. In the case of Primula sinensis this will sprout a second year, but the vitality of the seedling will already be weakened as it will not throw off the seed-cap uniting the two cotyledons. The following varieties may still sprout after 5 years if they come from well matured crops: Calendula, Calliopis, Centaurea, Poppies, Nasturtiums, Stocks, Snapdragons, Schizanthus and Zinnias. However fresh seed should only be used for Aralias, Asparagus, Gerbera, Ficus elastica, Phlox, Primula obconica. Often species of one and the same family behave very differently so for instance Balsams of the Balsaminaceae may retain their germinative power for seven years, whereas Impatiens will only germinate for two years. If fresh seed of certain varieties will not show the desired percentage, start another sowings after some weeks, because such seed will require a certain repose after having been gathered, so with Aster or Pansies.

On a whole you will now find that the seed-ball is a real individual thankful to you if adequate attention is being bestowed and you can be proud if your sowings have come out of their critical nascent stage with success. So don't be so quick in blaming your seedsman in case of a failure. Before selling his seeds he has made careful tests with most elaborate methods to facilitate your task and to supply you only with seeds of highest standard with regard to purity, germination, vitality and pedigree-qualities. W. S.

THREE NEW BEGONIAS from Germany

—Semperflorens compacta

50c pkt.
They come true from seed and are raised considerably quicker than the tuberous-rooted Begonias. Elegant habit and attractive appearance of plants makes them well adapted for edgings of beds or borders and also for group plantings.

—gracilis heterosis, Rose Jewel. Pkt. 50c
—gracilis heterosis, Red Jewel. Pkt. 50c

BLEEDING HEART

Dielytra spectabilis Pkt. 50c
Lilium gloriosum Pkt. 50c
A new hybrid, very highly recommended, white flowers similar to Regale.

So many write in about African Violet seed. Our best source for these is from the Russian Zone in Germany and it may be possible for us to secure seed very shortly, but we have received one lot from Switzerland, which is listed under Saintpaulia, its correct botanical name. We also wish to have a better detailed cultural article shortly on them.

• In The Mail

(Continued from Page 19)

in pots or boxes and covered with snow to germinate later? I have never found a satisfactory article on Autumn planting or winter planting of difficult seeds and would appreciate instructions." This is quite a question and a very important one too and shows that Mr. Selders is up on his flower growing. We want to attempt to answer it in this column on account of space, but will give this over to an article for next issue. Some plants, such as Larkspur, do best when planted early, even on the snow, as they are benefited by the freezing, as is also the perennial species, the Delphiniums, but what we usually mean by April planting is when the soil is dry enough and in condition so that it at least can be raked and the seed sown early enough so that they are benefited by the cold as well as being in position to germinate at the first opportunity. Perennials, the hardy ones or those which one is trying to get to flower the first year, are most all in this class, as well as all the real hardy annuals and biennials, with few exceptions.

James H. H. Bodge, R. No. 3, Brunswick, Maine, writes about the National Hybridizers Society. Anyone wishing to join should write him the annual dues are \$1.00.

Quite a long complimentary letter was received from Nora Dowell of Webb City, Mo., saying "I have read your catalog over and over and must say I have more enjoyment in becoming acquainted with these plants and the pronunciation makes it more interesting. The article by Frank Rose was most interesting and the Penstemon articles I so much enjoyed." It is a pleasure on our part to be able to give some help in the proper growing of the many different flower seeds we offer and the fewer the disappointments are the better, but when you do have a failure, and the very best of growers have them, it should be of some value, even to a lesson learned. Thanks very much for your letter Mrs. Dowell.

We are sorry not to be able to list this month any bulbs. Outside of taking care of the winter orders on Lillies, we will not list them this spring, but you can depend upon a full list of fall bulbs in the May or June issue.

FOR NEXT MONTH

Complete Listing of

IRIS

ALL KINDS

DAFFODILS

NARCISSUS

LILIES

Complete List

TIME TO ORDER WESTERN DORMANTS

As a further service to our customers wanting the more difficult and hard to find native western plants, we offer a special list of plants, as well as the opportunity to ask for others not listed, that can be collected and shipped AS FOUND. Mr. Rose, our collector, is an expert on this sort of collecting and all orders will be properly handled. Please keep in mind that his "nursery" covers 3-4 states and that he cannot skip out in the morning and dig up a plant at will—sometimes, he is not able to even find it.

By the end of June, in Montana, Nature has already begun seeding for next season but has not yet uncovered the plants in the higher parts of her Montana garden. Obviously she doesn't do everything at once and neither can we. It is a pretty good plan to follow Nature's methods but not so good to be circumscribed by them. She never learned for example to send mail orders or to time her automatic sprinklers to her plants needs. We are free to experiment with a better chance to succeed.

Starting plants from seed gives abundant plants at little expense and is generally recommended. It may take more time than one cares to spend or seed of the desired plant may not be available. In these cases transplanting collected plants is indicated.

In our opinion there are two best times to move plants. Before much growth starts in spring or after it stops in summer or fall. Some plants are quite exacting in their demands but most give considerable leeway. Iris for example is best moved before growth starts in early spring or from August on after growth for the season is finished. Iris has, however, been dug in bloom and hauled to the dump only to grow in its new location. Parry's primula, once common throughout subalpine Rocky mountains is becoming rare and usually promptly dies for most gardeners. The Iris is more adaptable than the primrose and less likely to succumb to the handicaps of palatability and lack of human understanding.

I don't know how to make Parry's primula happy in your garden but have some knowledge of westerns where they grow. I have been asked to rite a column on them for this publication. Such knowledge as I have of western plants in their native haunts I am most willing to share. Of their adaptability to eastern gardens however I have only second hand information.

Some plants of the plain and foothills will go dormant and disappear in June or July. If you want any now is not too soon to make your wants known. It would be wasteful to provide for a ant that will not develop.

Our earliest Fontana flower is a buttercup. That sounds common enough for buttercups are everywhere; but *Ranunculus glaberrimus* is an outstanding buttercup. Its large, waxy-yellow, fragrant flowers are out with the first warm days. They have been just ready to come since fall under their neutral or slightly acid sandy loam. This buttercup is also our earliest plant to seed and as the seed ripen irregularly and close to the ground they usually get away from even early orders. Dormant roots are available however and may be planted anytime from June to October. If suited the plants will reseed.

Lewisia redeviva, well known as a rock garden plant, goes dormant in July. After that none can be found. The shiny, black, lenze-shaped seeds are available. Seed is collected the last week of June or the first week of July here depending upon the season. They are long viable and freshness is not so important as favorable growing conditions from germination until its three year old maturity. For a plant whose dormant root will live for a year out of the ground moisture would seem unimportant. That doesn't seem to be true. Moisture can safely be disregarded only with bog plants. Of the millions of tiny bitterroots now showing on the area where I know it best only a relative few will mature. The plant seems to do equally well on pure clay and a nearly pure gravel. The high infant mortality I attribute to inter wet on the clay and summer drought on the gravel. After the roots mature they want a quickly drying crown with some moisture at the roots from early fall till the seed mature but must not have the air excluded from the soil in winter. Nature sows her seed abundantly and wide in July, covers them in August and germinates them in September. My geology professor used to say, "You have all the time you want in geology. "Nature seems to add, "Why hurry."

Among blue flowered dormants, are the dwarf *Mertensias* and *delphiniums*. My choice of the *Mertensias* is *M. longiflora*. No seed, sorry. The roots are tiny and must be collected in June before the sparse leaves disappear. Roots will keep over winter in a paper bag and may be planted either in fall or early spring. Other American bluebells the less compacted roots become brittle upon drying and must be handled with more care. The in-between roots of the dwarf larkspur may be handled much the same of *M. longiflora* although I prefer to cover them with humus and keep just moist enough to avoid brittleness. They produce a royal flower cluster in May on light soil and are quite adaptable.

Sand lily, *Leucocrinum montanum*, and queen cups, *Clintonia uniflora*, are of purest white. They grow far apart. Sand lily is of the dry open places to go at its season, but nothing is easier to handle. The queen cup is of the moist woodlands, with an underground strawberry runner for roots, putting up three large leaves at intervals with white lily-like flowers on the ground in spring followed in the fall by a single porcelain blue berry too heavy for its slender stem. The berries must be hunted for and picked singly so seed are not always available. The roots may be found from June to September. *Arnica cordifolia*, with a similar root, is a yellow composit.

We offer a dormant plant collection in units of three each of five species 15 plants in all for \$----- shipped in August if ordered in June. Try it.

SPECIAL DORMANT OFFER:

Three plants of five species — 15 plants in all, shipped in August on orders received before the end of June at the latest, for \$12.50, prepaid.

Lewisia redeviva: \$2.50 for 10 plants, Aug. and Sept. delivery.

Plants of: *Mertensia longiflora*, *Delphinium bicolor* and *men-siesii*, *Ranunculus glaberrimus*, *Woodsia scopulina*, *Anemone patens nuttalliana*, *Besseyia rubra*, *Malvastrum coccineum*, *Polygonum bistortoides*, *Spiranthes porrifolia* and *Calypso bulbosa*, etc., can be supplied at the rate of 3 plants each for \$2.75 prepaid, delivered as collected.

We will be pleased to receive your inquiries on any native western mountain plants and will advise and quote you separately.

Germinating Seed in light or Darkness

This is a subject that can be written about, without ever coming to the end. And the most difficult letter to write is in answer to a complaint about germination. If a certain lot of seed does not germinate, and we know it, it would not have been sent out, and we are continually making tests, so that we may know when the germination is low. Many of the common flowers, such as *Nasturtiums*, *Marigolds*, *Zinnias*, etc., are very easily germinated, but there are others that not only are difficult, but they require some attention and knowledge; then others require considerable time to germinate and with this type, one will have to be able to give the proper care at all times.

The matter of light or darkness is of importance, too, and we are now getting material together so as to indicate those that are particular to this requirement. Other seeds require a certain temperature and this is usually mentioned as cool or warm, in the cultural notes. Cool, means not over 60 degrees F. and warm, 60 degrees F. or more. Some tropical plants not only require a warm temperature but a moist one, much more moist than the usual northern sorts. And still others are benefited by placing the seed in the freezing compartment of your refrigerator for 3-6 days before planting; even to the actual freezing of the seed in ice cubes.

In 99 cases out of 100, the failure to get germination is due to some lack on the part of the grower; however, this ratio can just be reversed according to the grower and at times it is hard to see where the fault is. We had an experience last summer, where we planted some 10 species of a certain genus in a flat, one to a row. Two or three of them failed to germinate at all, and one would reasonably say they were no good; but we again made a similar planting of the failures together with a few we wanted more plants of and this time the failures germinated. We still cannot say why they did not germinate.

Again, where you purchase seeds collected in the tropics and especially those in India and such countries, do not expect as high a germination as you would on seeds gathered in sections where conditions are better; even the trip thru the tropics on such seed does them little good. And again, many of this type of seed arrives late and they are sent out before they can be germinated, but when we do find out that they are failures, we check the orders and send out credit slips.

Western native seeds are another group that requires a little patience and we try to have reading matter along this line, as often as possible.

Most flower growers, however have very little trouble in starting their flower seeds, which we are pleased to say, otherwise our labors would be very discouraging, but when you do have trouble in getting something started, always write us your problems and we will be more than willing to go into detail; and as soon as time will allow, there will be considerable more information on this subject, incorporated in the cultural matter under each listing.

The listing of seeds under their botanical name, while the best and correct method, is also necessary due to our international scope. Our customers are located in just about every country, and common names here would not be understood in other countries and common names even are different in parts of the U. S. Again, where only the most common varieties are offered, it would be simple to list them under *Canterbury Bells* or *Pinks* or *Forget-me-nots*, but when many species also are included that are *Campanulas* and not *Canterbury Bells*, it becomes necessary to list them all under their correct classification.

• Primulas

(Continued from Page 1)

of species involves both easy and difficult ones, and a few of the easiest are mentioned here, while from time to time others will be dealt with in this column.

With the exception of *Auriculas*, and of a few species that are not often available, primulas like a rich soil preferably containing considerable leafmold, plenty of water throughout the growing season, and light shade. Most kinds will flourish under an apple tree of a flowering crab, or on the north side of a house, where they look delightful among ferns. The *sikkimensis* and *candelabra* types rejoice in even more water, and are supremely happy along the bank of a brook, or at the edge of a pool. In cool climates with ample water, shade is not necessary for many kinds.

Most primula seeds germinate best if sown in late winter or early spring, while the weather is quite cool. Late fall sowing in open beds is practiced by some gardeners, but more success will be had by sowing in pots, or flats, container with a mixture of equal parts good loam and leafmold (or more rapidly if the soil has been sterilized before sowing. The seeds should be covered very lightly with soil, and set in a shaded place, preferably where they will freeze for a short time; the soil must never be allowed to dry, and covering with glass or building paper will aid in conserving moisture. Germination will take place in anywhere from one week to two years, depending on both weather conditions and species. Normally from late winter sowings the seedlings will begin to appear after a week or two of mild weather, while later sowings of most kinds will require at least three weeks, if indeed they decided to appear before the next season.

The customary rule is to transplant primulas when they have two true leaves, but I find that the delicate roots are quite resentful of disturbance, and that many species are almost impossible to move safely until at least a year old. Whenever possible I leave the seed-pots undisturbed until the second spring. *Polyanthus* and a few other vigorous species are exceptions, and can be set in their permanent quarters by the end of the first summer.

Polyanthus, often listed as *Primula veris elatior*, are the most popular of the entire race, and with good reason, for careful selection in recent years has developed strains that on foot-high stems have great heads of flowers that may be as large as a silver dollar, in all the colors of the rainbow, and many more. Seed of these normally requires two or three weeks to germinate, and the slower and weaker seedlings will give the finest flowers. Young plants come along rapidly, and in the long growing season of the Northwest will flower the first fall, but in the East no flowers can be expected for at least a year under open-ground culture. *Prima acaulis* (or vulgaris), a development of the wild English primrose, and the only *Primula* for which the name "primrose" is really correct, differs from the *polyanthus* only in having each flower on a separate short "stem" just above the rosette of leaves; the flowers are not quite as large as those of the most advanced strains of *polyanthus*, nor in as wide a range of color, but to many eyes are far more pleasing than the spectacular *polyanthus*.

The wild *Primula auricula* is invariably yellow in color, but through several centuries of garden cultivation it has been hybridised with one or more other European species and the modern garden auricula has a wide range of color, though in less intense tones than those of the *polyanthus*: in addition to many shades of yellow, one will find rich purples, near-reds, browns, violet-blues, and queer greenish and mustard shades. The leathery leaves of many plants are heavily coated with a white meal, known as farina, which adds greatly to their attractiveness. *Auriculas* prefer a less rich and heavy soil than (See *Primulas*, Page 22)

Some Very Easy Rock Plants

by C. R. Worth

One of the greatest charms of the rock garden is its display of sheets of brilliant color in earliest spring, before even daffodils and tulips are fully open. To accomplish this effect a very considerable number of plants is needed, for most rock plants are small, and few, other than undesirable rampers, will cover much more than a square foot of space; for really massed color effect, they should be put somewhat closer, and eventually thinned out if they show signs of being crowded. Small bulbs in quantity are needed too, and these, together with choice and rather expensive varieties that all rock gardeners crave, make a serious drain on the purse if all must be purchased as plants.

However, a great many really desirable rock plants can be raised from seed with ease and very little expense, and these are the very ones on which to depend for masses of color, not merely in early spring, but later in the season. Even if sown as late as June, they will make stocky plants ready to be moved to their permanent positions in September, which will make a great display the following spring, and even more in succeeding years. For these easy species, sowing in an open-ground bed is all that is needed. The soil should be worked up rather fine, after which the seed can be sown in shallow rows about six inches apart, and covered not more than a quarter-inch. Germination will be hastened if the seed bed is covered with a layer of burlap or with boards till the first seedlings appear, and watering will be lessened if the bed is made in very light shade, on the north side of a building or under an apple tree. Other than an occasional weeding, and watering during a dry spell, no attention will be needed until the plants are ready to be moved to the rock garden.

Of the many species suitable for such treatment, I have selected a few of the very easiest, which normally germinate in a week or less. Anyone who can raise radish and lettuce should have no trouble in producing these in quantities sufficient for his own needs and for gifts to friends.

The Mustard Family not only supplies many of our vegetables, but offers several of the most indispensable rock garden plants. These live up to the family reputation by "germinating like cress" and soon develop through a husky babyhood into vigorous flowering specimens, all of which are especially suited to planting in large groups for intense color display. Among the most desirable are *Alyssum*, *Arabis*, *Aubrieta*, and *Iberis*, while if one wishes to add a dash of mustard, *Cheiranthus* and *Erysimum* come in yellow and orange.

Alyssum saxatile is one of the best known of all rock plants, with tufts of rather large and jagged silver grey leaves, evergreen and ornamental at all seasons, while in early spring foot-high stems bear a great profusion of golden bloom, or in the variety *Silver Queen*, soft primrose flowers that will be more pleasing to many gardeners. But there are many other *Alyssums*, little prostrate plants or low shrubs, with small narrow leaves of dusty green, grey, or silver, and a quantity of yellow flowers rather smaller than those of *A. saxatile*. All of these are easy and happy on a sunny slope or trailing from a crevice. To get a great variety of these distinct and rather unfamiliar forms, try the "Rock Garden Perennial Rare Species Mixed."

The white *Arabis alpina* (or *albida*, as botanists now insist is correct), vies with *Alyssum* for the position of most popular rock plant. From a central rootstock low branches produce a sheet of somewhat lobed grey leaves, making a spreading mat only a very inch high, completely smothered under heads of large white blossoms on the first warm days of spring. There are also delicate pinks, varying much from seed, and a carmine-rose strain called *Fruhlingsszauber*, which I have not seen. Whichever color you choose, you will want to plant it in broad sheets, in either sun, for the first choice, or very light shade.

Aubrieta forms the third of the trinity of Cresses, with the habit of *Arabis*, but with much smaller green leaves. Its flowers range through a myriad of lavender, purple, blue and pink shades, and occasionally one comes semi-double. Named varieties are legion, especially in English catalogs, but seed from a good strain will give very satisfactory results. Strangely, this plant from the sunny hills of Greece likes a rather cool position in Eastern gardens, and is best grown on a north-facing slope or crevice; in the latter position it will trail down over the rocks and form a curtain of brilliant color.

Iberis repeats the type of flower of *Arabis*, but usually on a small woody bush, with narrow dark green leaves. *I. sempervirens* grows a foot high, and more across, and is one of the earliest flowering of all plants, often unable to restrain itself during a mild spell in late winter. *I. gibraltarica* flowers much later, and its flat clusters of lilac flowers are less impressive than are the glistening white ones of *I. sempervirens*; it is almost always short-lived. *Iberis juncunda*, usually known as *Aethionema coridifolium*, is one of the loveliest of all rock plants, easy or difficult. It makes a little loose bush six inches or less in height, and a bit broader, with narrow leaves of blue-grey, and in early summer bears at the tip of each branch a short head of rather large clear pink flowers, which on a humid morning fill the whole garden with a honey-sweet fragrance.

Among the daisies, *Aster alpinus* is one of the best for the rock garden, forming a clump of a number of rosettes from which spring a number of stiff foot-high stems, each bearing a single daisy two inches across with golden center and rays of violet or white; "pink" varieties are likely to be more nearly lavender-pink. Even-levelier, with longer narrower rays and more intense color, is *Aster subcoeruleus*. Both species are best in the more level places of the rock garden, flower in June, and are rather short-lived perennials.

Another little daisy which should come well from open-bed sowing, although I have never tried this treatment, is *Erigeron compositus*, from the central and northern mountains of the West. A small tuft three or four inches high when in bloom, and as much across, its tiny leaves are cut until they look like little fingers of softest grey; the half-inch daisies, with very narrow rays, come in white and soft lavender, with golden center. This, too, is short-lived, and I have never known it to self-sow here, but it comes so easily and profusely that this failing cannot be held against it. It will grow in shade, but becomes lanky there, and should have a choice spot in full sun.

No sunny rock garden is complete without a wealth of pinks. Some form low mats of green, others have narrow grey needle-like leaves and make hedgehog domes. In level but well drained positions, or sheeting a broad ledge, tumbling from a crevice, or perched on top of a mound, they are delightfully decorative throughout the year, and especially so when in June they burst into a sheet of bloom, small-flowered, or large-flowered, with petals merely notched or wildly fringed, from pure white through soft pinks to rose, many of them as deliciously scented as a carnation. For sheer delight and variety, select a packet of either "Rock Garden Pinks" or "Rare Species Dianthus", or choose according to taste from *DD. arenarius*, *caesius*, *monspessulanus*, *neglectus*, *deltoides*, and *knappii*; the last three are not fragrant.

Saponaria ocymoides throws long trailing stems set with oval leaves of rather bright green, and in early summer is covered with heads of rather large phlox-like flowers of clear pink. It displays itself best in a wall or tumbling down a ledge, and seems indifferent to sun or light shade.

Silene schafta would probably not rate very highly if it flowered in spring, but coming in late summer, when there is little bloom in the rock garden, it merits considerable attention. Its pink-like flow-

• Primulas

(Continued from Page 21)

most Primulas, like lime, and are happy chinks and crevices of the rock garden. Seed will germinate well only exposed to a month or so of cold weather or given other special treatment. Seedlings require two, or more often three, years to reach blooming size, but then increase rapidly.

Western plants of the Primrose family are "Difficult subjects" so they say. I don't know much about primulas so perhaps that is as good a reason as any for me to write about *Douglasia montana* or Mountain Pink which in my botany is just between *Primula parryi* and *Drosace carinata*, proving I guess that botanists look at plants through technifocal glasses. When not in bloom I could confuse the pink flowered *Douglasia* with the better known white flowered *Drosace* but never with that proud and palatable *Primula parryi*.

In March or April, before the last spring snows have gone, the long rock and gravel ridge above Missoula's gravel pit may turn a rose pink as though absorbing the earliest and latest of the sun's rays into this mountain valley. If we climb to this red tinged ridge we will find that the *Douglasia* is in bloom. Each compact cushion hugging the gravel for warmth but tiny bright and numerous, one to a stem, flowers unmindful of the raw March wind that numbs our cheeks and fills our eyes with tears.

If the area has been undisturbed and the seasons favorable for several years the tufts may measure from three to twelve inches across. If drought or trampling has thinned the mature plants, numerous tiny green, or reddish if the weather is cold, nobs may demonstrate the viability of the 4 to a flower seeds stored in the gravel.

Two weeks later, up Drummond bloom in pure clay doam and later still the barren spots of the way, equally thrifty plants will higher mountains will be tinted.

ers of rose-purple are produced on rather loose mats of narrow green leaves.

Geraniums come easily and promptly from seed, but most of them are for the woodland or wild garden. The few rock garden species are very well worth growing. *G. sanguineum* has rather small deeply slashed leaves, grows about eight inches high and spreads slowly into a mound that after many years may be several feet across. Its flowers, more than an inch wide, are vivid reddish purple, and there is also a lovely white form. *G. collinum* has not yet flowered here, but its frail growth makes it resemble lovely *G. farreri*, and I am hoping for fine things among my batch of seedlings. *G. grevilleanum* I have never seen, but from the description, its prostrate habit and pale rose flowers two inches across make it sound extremely desirable.

Campanulas, the Bellflowers, are indispensable, although most of the dwarf ones probably need more careful attention in their early stages than can be given in an open bed; the seed, by the way, should be barely covered with soil. There are at least two species which need no special care as seedlings: *C. carpatica* sends up a great many stems, sometimes nearly a foot high, though it is quite variable, set with narrowly heart-shaped glossy green leaves, and through midsummer produces a host of big shallow bells, in various lavender-blue shades, and exquisite white. *C. rotundifolia olympica*, a form of the Scotch harebell, has narrow bells of pale to deep lavender-blue, in countless profusion, along a mass of thin wiry foot-high stems. Perhaps *C. garanica*, of barely half the height, and with bright violet-blue stars, will also be satisfactory sown in the open, but I have not treated it so.

The true mountain Pansies are hard to obtain and harder to keep, but their remissness is not too hard to bear, for among the smaller-flowered *Violas* are many delightful substitutes. I do not care for the ones with fair-sized rounded flowers, for in the rock garden they look like undernourished bedding pansies; I choose the ones with rather long and narrow faces, that seem to follow one's every movement about the garden. The little Black Imp (*Bowles' Black*), of black velvet with a tiny spot of blue just below the golden eye, and multicolored forms of *V. saxatilis* are good choices for a start. Although short-lived, they leave behind a host of children, and these offspring have the little elfin faces that I love—often with sooty cheeks, from the influence of the Black Imp. Give them sun or light shade, and they will soon choose for themselves the places in your garden that they prefer.

Forget-me-nots, in spite of their tendency to self-sow all over a damp or shady garden, are so well loved that they cannot be passed by. Any you select will delight you, although my own preference is for *Mysostis paultris*, which is particularly happy along the edge of a pool or brook.

The names of the various *Polemoniums* are sadly confused, and I have no idea of just what will come from a packet of *P. haydeni*, except that it will have ferny leaves and loose sprays of small saucer-shaped flowers of blue or white, golden-eyed. I can also predict that it will be delightful, and that it will grow in either sun or light shade; in the wild this type of *Polemonium* loves to half-conceal itself at the edge of a shrub.

And now, for real "adventure", try a packet of mixed rock garden perennials, as I shall. I do not expect to get plants of anywhere near the 300 species comprising the mixture, although I shall leave that seed bed undisturbed for at least a year, to allow the slow germinators time to appear; but I do expect to get a sample of many of the common species, and a number that I have never grown before. Dotted in odd corners of the rock garden, they will surprise me by flowering in a year or two, after I have forgotten all about them, and for a while I shall be puzzled as to how they ever arrived in my garden. I expect to get many thrills from that packet, and at some later date shall report on what came out of it, to make you wish you had sown a packet too—if you've not already taken my advice and done so.

On the clay hillsides along the Clark's fork river, some may cluster about a juniper bush but mostly the open ridge and full sun seems best so my guess on this one would be a typical scree condition with exposure and perfect drainage, yet with a cool, moist root run. Practically, a pocket of gravel, too lean and dry for grass, but where the roots may penetrate to clay or a buried stone for moisture. If you grow *Douglasia* you will love it.

Perhaps the easiest of all Primulas for the beginner is *P. denticulata*. Seedlings usually come up in about a week, flowering the second spring, although at least another year is required for them to reach full size. Mature plants have long rather narrow leaves, suggesting somewhat a cos lettuce. In earliest spring, so early that they may be damaged by late freezes, appear on foot-high stems great globular heads crowded with many flowers ranging in color from pure white through lavender shades to deep violet. In fall the plant dies down to a resting bud at the surface of the ground, often as large as a clenched fist, within which the next season's flowers are carefully tucked away. *P. cashmeriana*, which often appears in lists, is a botanically invalid name, and differs from *P. denticulata* no more than in the color of the meal on the underside of the leaves.

Primula sikkimensis is the center of a group of plants (*PP. microdonta*, *florindae*, *secundiflora*, etc.) which differ only in height and color, and somewhat in the shape of the basal leaves. They flower later than the species previously mentioned, and on naked stems that very from less than one foot to more than three in height, have a head of dangling primrose flowers. In *PP. sikkimensis* and the giant *P. florindae* the color is yellow, while red and white shades occur in *P. secundiflora* and *P. microdonta violacea*. This entire group comes as easily, though not quite as promptly, from seed as *P. denticulata*, and is particularly fond of a location near water.

MONTANA CACTI

F. H. Rose

Montana has something of a reputation for lonesome men and howling blizzards. You may not be able to love either but even so certain of their qualities must be admired. So also with Montana cacti. Only four species are found but like our men and weather they are not softies. The thermometer may freeze and break but Montana cacti will come out and bloom in the spring. Two *Oputias* and two of the ball or pincushion type make up the list. Briefly, as becomes Montana biographies, the four are; *Opuntia polyacantha*, The Prickly pear, a flat leaf (stemmed) type that grows easily and makes an ample display of large yellow blossoms. Long stiff brownish spines and short eager ones protect it from all but fire and rodents. Old stems are retained and new ones added until one plant may form a considerable patch. The top of an old dirt roofed cabin is about right for its culture. *Opuntia fragilis* duplicates the flowers of the Prickly Pear but has small round leaves (stems) joined end to end, the upper one breaking off easily giving its common name of Jump cacti. While sometimes found with *Opuntia polyacantha* it extends more into the mountains, tolerating, if the drainage is good, more rainfall. It is low growing, a patch of plump green rounded cylinders amply armed with short but vicious prickles. The *Opuntias* can always be found if one looks in the right places. The pincushion or ball type are more retiring. *Coryphantha vivipara* arms each tuberful with three or four stiff spines surrounded by a cluster of smaller ones. The flowers are purple and its fruits the following spring are green. Its stems though usually single sometimes form clusters of varying size. It is at home in a gramma grass sod. *Coryphantha missouriensis* seems shy, sometimes almost burying itself in the sandy soil. Its soft white spines are not hostile so perhaps it finds safety in seclusion. In season it circles its top with straw colored flowers, not very conspicuous, but the fruits the following spring are brilliant red to attract the attention of whatever bird or animal this cacti depended upon for seed dispersal, before seed companys published catalogues.

Montana's four cacti may hardly be adequate for a conservatory but if your opportunity is limited and your winters severe, three yellows and a red so different in type will represent the family fairly well and bring a desert in miniature to your garden.

NOTE: We can furnish a collection of three plants of the above four, described and the fourth, if found, all for \$2.00 prepaid, shipment during June to October. It will take at least 30 days to fill an order if placed DURING this date; order placed before will be shipped as soon as collected.

Listing flowers under annuals, biennials and perennials, as is done in some catalogs of flower seeds, is all right where but the most common kinds are offered but when the list becomes rather extended, as ours, this cannot be done, without confusion. Many species may be perennial in the South but must be handled as annuals in the North; the principle point is whether they live only the first year or whether they can be carried over to the next. And to have a genus all together is more to the point than having it scattered all over a book, requiring an index to find it.

Save all your rakings, leaves, etc., for a compost pile and when decayed, mix it with a little soil, some sand if possible, and cover the soil around the new plants. You will find the mulch will work wonders.

Has your favorite flower been properly written up? If not why not write us?

LAWN GRASSES

We offer only the very best grades of Lawn Grasses. We suggest that you order separate grasses, when possible, rather than mixtures, as you will more likely have a more suitable stand of grass for the purpose you wish as well as for the particular soil. The mixtures that we offer from time to time, are made up especially for the season in which they are listed.

Kentucky Blue Grass

This is the most satisfactory lawn grass for the northern part of the country and should make up at least 80% of any sowing. For sowing in March, which is the best time, a 100% seeding can be made. It requires about 21 days to germinate and thus the best stands will be secured when planted early.

PREPAID: Lb. 60c; 3 Lbs. \$1.60; 10 Lbs. \$4.80; 25 Lbs. \$11.60.

NOT PREPAID: 112 lbs. bags, at 43c per lb.

ANALYSIS: Pure Seed 92.27%; Germination 80%; Inert Matter, 7.04%; Weed Seed .87%; Crop Seed .32%, 2 Buckhorn per oz. Grown in Ky. This lot weighs better than 24 lbs. per bushel and is a very choice lot.

Lawn Red Top

Where a quick growth is wanted for a start and especially on soils that are towards the wet side, Red Top makes an excellent Lawn Grass. It is a fine grass, germinates quickly and can be sown as soon as the ground is ready in the spring. Blue grass should be sown with it for the permanent grass. Red Top has a more pleasing appearance than the Rye Grasses or Timothy, which is often used for a quick growth.

PREPAID: Lb. 40c; 3 Lbs. \$1.10; 5 Lbs. \$1.75; 10 Lbs. \$3.25

Dutch White Clover

White Clover gives the lawn a dark green appearance and a velvety texture. It is quick to germinate and can be sown in March, on the snow, as well as later in the spring. It is an excellent grass to plant with Blue Grass and one of its most important advantages is that it gives a green lawn during August when Blue Grass is likely to dry up during a hot dry spell. Sow about $\frac{1}{4}$ - $\frac{1}{2}$ lbs. to the square rod on new seedings and half as much for established lawns.

PREPAID: Lb. 95c; 3 Lbs. \$2.75; 10 Lbs. \$8.25.

WE RECOMMEND for a general Lawn Grass mixture for sowing on old lawns, for March sowing, Blue Grass, 80%, Red Top, 15%, White Clover 5%. When ordered in 10 Lbs. lots, use the 10 Lbs. rates above for prices.

Ordering—Important

First be sure to print your name and address. We get hundreds of letters every week of which it is impossible to make out properly.

Remit in checks, money orders or, at your risk, in cash. We did not have a single cash remittance lost last year, but it could happen. Orders amounting to 25c you can remit in 1c stamps; 25c - 50c in 3c stamps; 50c - 95c in 5c or 10c stamps, but over this amount do not send stamps, please. Michigan customers please add their 3% sales tax. Don't forget.

Orders for seeds, bulbs, plants, etc., are not mailed in one package. Seeds usually go out by return mail and are not acknowledged, but if there is any delay in shipping you will receive an acknowledgement.

On Flower Seeds there is a key-number just before the price. To save you a lot of writing just use the symbol. It is short and easy.

U. S. A.

"Pioneer Seed Co., gives no warranty, express or implied, as to the productiveness of any seeds or bulbs it sells and will not be in any way responsible for the crop. Our liability, in all instances, is limited to the purchase price of the seeds or bulbs."

If this order should become subject to any sales, use, or other tax, please add the correct amount to your remittance.

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Mrs.
Miss _____
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or R. F. D. _____

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Zone _____

Express Office (If different from P. O.) _____

County _____ State _____

State Here } P. O. Money Order ☐
Amount Enclosed } Express Money Order ☐
 } Check or Draft ☐ \$ _____

Supt. or Gardener's Name _____

Please do not write in this space				
Stamps				
Cash				
M. O.				
Check			Sent	Date
F. S.				
Bulbs				
V. S.				
Lawn				
Field				
Sun				
Riv.				

Seeds and Bulbs sent Prepaid

They are forwarded on receipt of order unless instructed to the contrary. Be sure you state the correct variety numbers besides quantity and price.

Pioneer Seeds and Bulbs

[illegible]

If sold out of any variety may we substitute? Yes ☐; No ☐

Total for Seeds and Bulbs \$

Garden Tools, Fertilizers, Insecticides, etc.

These can be sent only by Express or Freight at customer's expense, except where quoted postpaid in the catalog

[illegible]

We Should Appreciate

the names and addresses of some of your friends interested in gardening so that we may send them some of our literature.